

# A+ Servers

# Opteron<sup>™</sup> 6000/4000/3000 Family Based Platforms



# Server Building Block Solutions®

Twin Family · GPU · SuperBlade<sup>®</sup> · 4-Way · MicroCloud · Embedded

10GbE · InfiniBand · 96%+ Digital Power · BBP<sup>®</sup> · Switches

Opteron<sup>™</sup> 6300/4300/3300 CPU Ready



# **Optimized Twin Architecture with AMD Opteron**<sup>™</sup> **Performance**



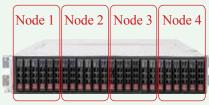
Up to 128 Cores in 2U Four DP Nodes in 2U



- · Highest Performance per Watt
- Highest Performance per Dollar
- Four Independent Hot-pluggable DP nodes
- · Redundant Platinum Level Power Supply
- Power-Efficient Serverboard & Cooling Subsystem Designs
- 6Gb/s SAS (SAS 2.0) Optional



2U Twin<sup>2®</sup>
3x3.5" HDDs per Node



2U Twin<sup>2®</sup> 6x2.5" HDDs per Node

### 12 Modular UP Server Nodes in 3U





- High density with 12 hot-pluggable UP nodes in 3U
- High efficiency Platinum Level (94%+) 1+1
   Redundant Power Supplies
- Supports 8/4-Core AMD Opteron™ 3000 Series Processors
- 65W CPU Support available
- Dual 3.5" HDD (optional 4x 2.5" HDD) per node
- IPMI 2.0 + KVM with dedicated LAN



(Rear View)

# **64-Core 1TB 1U 4-Way AMD Opteron™ Server for Enterprise & HPC**



G34 Socket



#### Supports 16/12/8/4-Core AMD Opteron<sup>™</sup> 6000 Series Processor

- Enhanced Motherboard I/O Bandwidth and Performance
- Optimized for wire speed QDR InfiniBand with PCI-E 2.0 x16 slot
- Up to 1TB Registered ECC DDR3 DDR3-1600/1333/1066 SDRAM in 32 DIMM Slots

#### More Cores = More Performance

- 16/12/8/4-Core AMD Opteron Support, 64/48/32/16 Cores in 1U
- Best Dollar per Core Value

#### Peace of Mind & Low TCO

- IPMI 2.0 Management with KVM and Virtual Media Option
- · High-Efficiency Power Supplies



1U Rackmount AS1042G-LTF 1866MHz Support



2U Rackmount AS2042G-72RF4 LSI\* 2208 SAS Controller Quad Gigabit LAN



4U Rackmount AS4042G-72RF4 LSI\* 2208 SAS Controller Quad Gigabit LAN

# **Resource Optimized High-End Enterprise Server**

# **UIO Servers**

Up to 32 Cores in 2U



2U Rackmount AS2022G-URF4+

- Flexible I/O with Supermicro UIO (Universal I/O)
- Up to 768GB Registered ECC DDR3-1600/1333/1066
   SDRAM in 24 DIMM Slots
- Redundant Platinum Level Power Supply
- Supports 16/12/8/4-Core AMD Opteron<sup>™</sup> 6000 Series Processors
- · Available in 1U and 2U with Quad Gigabit Ethernet



(Rear View)

# Up to 512GB DDR3-1600/1333/1066 6 PCI-E 2.0 slots 6Gb/s SAS (SAS 2.0) 16/12/8/4-Core High-End DP Serverboard



# **SUPER®** H8DG6-F

he H8DG6-F is a high-performance serverboard that supports a large complement of 16 DIMMs for up to 512GB of Registered ECC DDR3-1600/1333/1066 high speed memory with the latest generation AMD Opteron™ 6300 series 16/12/8/4-Core Socket G34 processors. The H8DG6-F supports 3 PCI-E 2.0 x16, 1 PCI-E 2.0 x8, and 2 PCI-E 2.0 x4 (in x8 slots), which can accommodate up to 3 double-width enterprise level GPU cards operating with non-blocking native PCI-E 2.0 x16 connections. This feature rich high performance serverboard also provides 8 SAS 2.0 (6Gb/s) ports, dual Gigabit Ethernet LAN, and integrated IPMI. These cutting-edge features are integrated onto an Extended-ATX form factor and are backed by Supermicro's unrivaled product quality and support.

The large memory footprint and powerful processing capacity of the H8DG6-F provides ample capacity to handle huge data sets, complex applications, or highly virtualized applications with ease. The flexible PCI-E 2.0 configuration can scale with any application.

The H8DG6-F serverboard is optimized for general server and application server environments in medical, storage, HPC, gaming, oil and gas, finance and database vertical markets.

#### **Key Features**

- Dual AMD Opteron<sup>™</sup> 6000 Series processors (Socket G34) 16/12/8/4-Core ready
- 3.2 GHz HyperTransport (HT3.0) Link
- Up to 512GB of DDR3 Registered ECC 1600/1333/1066 or 128GB of DDR3 Unbuffered ECC/non-ECC SDRAM in 16 DIMM Slots
- 3 PCI-E 2.0 x16, 1 PCI-E 2.0 x8, 2 PCI-E 2.0 x4 (in x8) slots
- LSI 2008 SAS 2.0 (6Gb/s) 8-port Controller; RAID 0, 1, 10; RAID 5 (optional)
- 6 SATA 2.0 (3Gb/s), RAID 0, 1, 10
- 8 USB 2.0 ports (2 Rear, 2 headers (4 ports), 2 TypeA)
- 2 Gigabit Ethernet LAN with Intel<sup>®</sup> 82576 Controller
- Integrated Matrox G200eW graphics
- Winbond WPCM450 IPMI 2.0 Support
- 12" x 13" EATX form factor

# Socket AM3+ 2 PCI-E 2.0 slots 6Gb/s SAS (SAS 2.0) 8/4-Core microATX Serverboard



## SUPER® H8SML-7F

he Supermicro H8SML-7F is the first DDR3 AM3+ UP microATX serverboard available for the AMD Opteron 3000 series 8/4-core processor, offering low power TDP (65W, 45W/HE or 25W/EE) for optimized computing performance and maximum energy savings. The H8SML-7F is based on the AMD SR5650/SP5100 chipset, with 4 DIMMs for up to 32GB unbuffered ECC providing best memory performance, plus onboard BMC, LSI 2308 SAS2 (6Gbps) and dual Intel Gigabit LAN support. The H8SML-7F follows standard microATX mounting hole locations so customers can match this serverboard with a variety of Supermicro chassis as an optimized server solution.

The H8SML-7F is targeted for data center service providers, SMB UP solutions requiring SAS2 and SATA HDDs, and single dedicated applications such as IT infrastructure applications, file/print/web servers, and messaging environments. The H8SML-7F plus CPU is an aggressively cost optimized enterprise-class platform at desktop prices exhibiting excellent product longevity with embedded chipset and CPU support.

#### **Key Features**

- Single AMD Socket AM3+ Opteron 3000 (3300/3200) series (8/4 Core ready)
- · AMD SR5650/SP5100 Chipset
- 2.6 GHz HyperTransport (HT3.0) Link
- Up to 32GB Unbuffered ECC/non-ECC DDR3 1600/1333/1066MHz in 4 DIMM Slots
- 1 PCI-E 2.0 x8 in x16, 1 PCI-E 2.0 x4 in x8 slot
- 6 SATA2 (3.0Gbps), RAID 0, 1, 10
- LSI 2308 SAS2 (6Gb/s), RAID 0, 1, 10
- 2 Gigabit LAN with Intel Hartwell 82574L controller
- · Integrated Matrox G200eW Graphics
- Winbond WPCM450 IPMI 2.0 support
- 7 USB 2.0 ports (2 Rear, 2 headers (4 ports), 1 TypeA)
- 9.6" x 9.6", microATX serverboard

#### **Optimized Chassis support:**

- 1U: SC512, SC811, SC813M, SC111, SC113M
- 2U: SC823M, SC825M, SC523
- Tower: SC732, SC733



Supermicro installs safety caps on all serverboards to protect the CPU socket pins. Read and follow the important instructions on this protective cap to insure proper product safety.

CPU Socket cap MUST always be installed when the CPU is not installed.

#### Featured Products & Solutions **A+ Motherboards & Chassis** MP Serverboards H8QG7-LN4F/H8QGi-LN4F, H8QG7+LN4F/H8QGi+LN4F, H8QG6-F/H8QGi-F, H8QG6+-F/H8QGi+F, H8QGL-6F/H8QGL-iF, H8QGL-6F+/H8QGL-iF, H8QGL-6F+/H8QGL-iF, H8QGL-6F-/H8QGL-iF, H8QGL-6F-/H8QGL-iF, H8QGL-6F-/H8QGL-iF, H8QGL-6F-/H8QGL-iF, H8QGL-6F-/H8QGL-iF, H8QGL-6F-/H8QGL-iF, H8QGL-iF, H8QGL-H8QI6-F/H8QIi-F, H8QI6+-F/H8QIi+-F, H8QM3-2/H8QMi-2, H8QM3-2+/H8QMi-2+, H8QM8-2/H8QME-2, H8QM8-2+/H8QME-2+ 6,8 8/4-Core AMD Opteron" 3000 Series Processor, AMD SR5650/SP5100 chipset H8SML-7F/H8SML-1, H8SML-iF/H8SML-1, H8SME-F. Quad-Core AMD Opteron" 1000 Series Processor, NVIDIA MCP55-Pro/ServerWorks HT1000 chipset H8SMA-2/H8SMi-2, H8SSL-i2 Quad-Core AMD GX-420CA H9SKV-420 H9SKV-420 16/12/8/4-Core AMD Opteron 6000 Series Processor (6300P ready), AMD SR5650+SP5100 chipset H8SGL-F/H8SGL ... 8/6/4-Core AMD Opteron™ 4000 Series Processor (4300 ready), AMD SR5650+SP5100 chipse H8SCM-F/H8SCM . . DP GPU Serverboards 16/12/8/4-Core AMD Opteron 6000 Series Processor (6300P ready), Dual AMD SR5690+SP5100 chipset H8DGG-QF . . . . . DP Twin Serverboards H8DGT-HLF/HBQF, H8DGT-HF/HBQF 8/6/4-Core AMD Opteron" 6000 Series Processor (6300P ready), AMD SR5690+SR5670+SP5100 chipset H8DGT-HLF/HLIBQF, H8DGT-HF/HIBQF 8/6/4-Core AMD Opteron" 4000 Series Processor (4300 ready), AMD SR5690+SR5670+SP5100 chipset H8DCT-HLN4F, H8DCT-HBQF, H8DCT-F/IBQF 6-Core AMD Opteron" 2000 Series Processor, NVIDIA MCP55-Pro chipset H8DMT-INF+/H8DMT+, H8DMT-IBXF/H8DMT-IBX, H8DMT-IBX/H8DMT-F, H8DMT A+ SuperServer® 1U MP SuperServer\* System 6-Core AMD Opteron" 8000 Series Processor, AMD SR5690+SP5100 chipset 1041A-T2F... 16/12/8/4-Core AMD Opteron™ 6000 Series Processor (6300P ready), AMD SR5690+SP5100 chipset 1U DP SuperServer' System 16/12/8/4-Core AMD Opteron" 6000 Series Processor (6300P ready), AMD SR5670+SP5100 chipset 1022GG-TF, 1122GG-TF, 1022G-URF/NTF . . . . . 8/6/4-Core AMD Opteron\* 4000 Series Processor, AMD SR5670+SP5100 chipset 1022TC-TF/IBQF 0221C-1F/IBQF /4-Core AMD Opteron™ 3000 Series Processor, AMD SR5670+SP5100 chipset 1021A-M73RF, 1012A-MTF, 1012A-MRF 1U UP SuperServer Systems 16/12/8/4-Core AMD Opteron™ 6000 Series Processor (6300P ready), AMD SR5670+SP5100 chipset 1012G-MTF 8/6/4-Core AMD Opteron 4000 Series Processor, AMD SR5670+SP5100 chipset 1012C-MRF . . 2U DP/UP SuperServer Systems 20 DP/OF Superserver Systems G34 2U Twin²-16/12/8/4-Core AMD Opteron™ 6000 Series Processor (6300P ready), AMD SR5690+SP5100 chipset 2022TG-H6RF/H6lBQRF, 2122TG-H61BQRF/2122TG-H6RF, 2022TG-HLIBQRF/HLTRF, 2122TG-HTRF/HIBQRF, 2022TG-HTRF/HIBQRF. 24,25 C32 2U Twin²-8/6/4-Core AMD Opteron™ 4000 Series Processor, AMD SR5670+SP5100 chipset 2122TC-H6RF4/HTRF4, 2022TC-BTRF/BIBQRF, 2122TC-DL6RF4. 25,26 201 MP SuperServer Systems 16/12/8/4-Core AMD Opteron 6000 Series Processor (6300P ready), AMD SR5670+SP5100 chipset 2042G-6RF, 2042G-TRF, 2042G-72RF4 634 SuperServer® 16/12/8/4-Core AMD Opteron\* 6000 Series Processor (6300P ready) 6-Core AMD Opteron\* 2000 Series Processor 2021A-32R+F/2021A-T2R+F, 2022G-URF4+, 2022G-URF . . . MicroCloud 8/4-Core AMD Opteron™ 3000 Series Processor, AMD SR5650+SP5100 chipset 3012MA-H12TRF ..... 4U DP/UP SuperServer Systems

#### A+ SuperBlade®

A+ SuperBlade® . . . .

16/12/8/4-Core AMD Opteron™ 6000 Series Processor (6300P ready), AMD SR5690+SP5100 chipset

6-Core AMD Opteron\* 2000 Series Processor, NVIDIA MCP55-Pro+IO55, NEC 720400 PCI-X Bridge chipset 4021A-T2/4021A-T2B

#### Accessories Matriarly Adapta

4022G-6F

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MODEL	H8QG7-LN4F/H8QGi-LN4F H8QG7+-LN4F/H8QGi+-LN4F	H8QG6-F/H8QGi-F H8QG6+-F/H8QGi+-F	H8QGL-6F/H8QGL-iF H8QGL-6F+/H8QGL-iF+	H8Q16-F/H8QIi-F H8Q16+-F/H8QIi+-F
Processor	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron <sup>™</sup> 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 8000 Series Processors
Chipset	AMD SR5690+SR5670+ SP5100 AMD SR5690+SP5100 (+ version only)	AMD SR5690+SR5670+ SP5100 AMD SR5690+SP5100 (+ version only)	Dual AMD SR5690+SP5100 AMD SR5690+SP5100 (+ version only)	AMD SR5690+SP5100
Form Factor	SWTX 16.48" x 13"	SWTX 16.48" x 13"	SWTX 16.48" x 13"	SWTX 16.4" x 13"
Optimized Chassis	H8QG7+-LN4F/H8QGi+-LN4F: 1U: SC818TQ-1400LPB H8QG7-LN4F/H8QGi-LN4F: 2U: SC828TQ+-R1400LPB 4U: SC748TQ-R1400B SC848E16/A-R1K62B	H8QG6+-F/H8QGi+F: 1U: SC818TQ-1400LPB H8QG6-F/H8QGi-F: 2U: SC828TQ+-R1400LPB 4U: SC748TQ-R1400B SC848E16/A-R1K62B	H8QGL-6F+/H8QGL-iF+: 1U: SC818TQ-1400B H8QGL-6F/H8QGL-iF: 2U: SC828TQ+-R1400LPB 4U: SC748TQ-R1400B SC848E16/A-R1K62B	H8QI6+-F/H8QIi+F: 1U: SC818TQ+-1000B H8QI6-F/H8QIi-F: 2U: SC828TQ-R1200LPB 4U: SC748TQ-R1200B** SC848E16/A-R1K62B**
Memory Capacity & Slots	1TB ECC Registered or 256GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 32 DIMMs	1TB ECC Registered or 256GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 32 DIMMs	512GB ECC Registered or 128GB unbuffered ECC/non-ECC DDR3 1866/1600/1333/1066 SDRAM in 16 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs
Expansion Slots	H8QG7-LN4F/H8QGi-LN4F: 2 PCI-E 2.0 x16; 2 PCI-E 2.0 x8; H8QG7+LN4F/H8QGi+-LN4F: 1 PCI-E 2.0 x16	H8QG6-F/H8QGi-F: 2 PCI-E 2.0 x16; 1 PCI-E 2.0 x8; 1 PCI-E 2.0 x8 or 1 Universal I/O slot; H8QG6+-F/H8QGi+-F: 1 PCI-E 2.0 x16	H8QGL-6F/H8QGL-iF: 3 PCI-E 2.0 x16 2 PCI-E 2.0 x8 (in x16 slot) 1 PCI-E 2.0 x4 (in x16 slot) H8QGL-6F+/H8QGL-iF+: 1 HyperTransport slot 1 PCI-E 2.0 x16	H8Q16-F/H8QIi-F: 3 PCI-E 2.0 x16 1 PCI-E 2.0 x8 2 PCI-E 2.0 x4 (in x8 slot) 1 Universal I/O slot H8Q16+-F/H8QIi+F: 1 HyperTransport slot 1 PCI-E 2.0 x16
Onboard SAS/SCSI/SATA/ RAID	LSI* 2208 SAS2 Controller for 8 SAS2 ports, HW RAID 0, 1, 5, 6, 10, 50, 60 (H8QG7-LN4F/H8QG7+-LN4F only) 6 SATA2 ports, RAID 0, 1, 10	LSI* 2008 SAS2 Controller for 8 SAS2 ports (H8QG6-F/H8QG6+-F only) 6 SATA2 ports, RAID 0, 1, 10	LSI* 2008 SAS2 Controller for 8 SAS2 ports (H8QGL-6F/H8QGL-6F+ only) 6 SATA2 ports, RAID 0, 1, 10	LSI* 2008 SAS2 Controller for 8 SAS2 ports (H8QI6-F/H8QI6+-F only) 6 SATA2 ports, RAID 0, 1, 10
RAID Support	N/A	AOC-SAS2-RAID5-KEY (H8QG6(+)-F only)	AOC-SAS2-RAID5-KEY (H8QGL-6F(+) only)	AOC-SAS2-RAID5-KEY (H8QI6(+)-F only)
Onboard LAN	Quad LAN with Intel® i350 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet
Onboard VGA	Matrox G200eW graphics controller	Matrox G200eW graphics controller	Matrox G200eW graphics controller	Matrox G200eW graphics controller
Build-in EIDE/USB Ports	Up to 7 USB 2.0 ports	Up to 7 USB 2.0 ports	Up to 7 USB 2.0 ports	ATA133/100 Up to 6 USB 2.0 ports
Other Onboard I/O Devices	1 SATA DOM power connector 1 fast UART 16550 serial port PS/2 mouse & keyboard conn. TPM header	1 SATA DOM power connector 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. TPM header	1 SATA DOM power connector 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. TPM header	1 DOM power connector 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.
Manageability	Winbond WPCM450 BMC IPMI 2.0, KVM and VM options, Watch Dog, SuperDoctor III	Winbond WPCM450 BMC IPMI 2.0, KVM and VM options, Watch Dog, SuperDoctor III	Winbond WPCM450 BMC IPMI 2.0, KVM and VM options, Watch Dog, SuperDoctor III	Winbond WPCM450 BMC IPMI 2.0, KVM and VM options, Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, +3.3V, +5V, +12V, 3.3V standby, VBAT, and total of 9-fan status, memory voltage, chipset voltage, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +1.8V, 3.3V, +5V, +12V, 3.3V standby, VBAT, and total of 9-fan status, memory voltage, chipset voltage, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +1.8V, 3.3V, +5V, +12V, 3.3V standby, VBAT, and total of 9-fan status, memory voltage, chipset voltage, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +1.8V, 3.3V, +5V, +12V, 5V standby, VBAT, and total of 9-fan status, supports system management utility, chassis intrusion header
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication
Other Features	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM

<sup>\*</sup> Fully populated DDR2 800/667 memory will be downgraded to DDR2 533 \*\* Please refer to page 7 for extra components needed.







#### **SC818TQ Series**

- 3 hot-swap 3.5" drive bays
- 6 heavy duty counter-rotating fans
- 1400W Gold /Platinum Level (94%+) power supply Optimized for 1U 4-way systems
- 1Û x 27.75"







#### SC828TQ+-R Series

- 6 hot-swap 3.5" drive bays
- 6 hot-swap 5.3 drive pays
  6 hot-swap cooling fans
  1400W Gold /Platinum Level (94%+) redundant power supplies
  2U x 27.75"



- SC848E16/A Series
   24 hot-swap 3.5" drive bays
   6 hot-swap cooling fans
   1620W Platinum Level (94%+)
- redundant power supplies
- 4U x 29"

#### SC418E16 Series

- 48 hot-swap 2.5" drive bays
- 6 hot-swap cooling fans
- 1620W Platinum Level (94%+) redundant power supplies
- 4U x 29"







#### SC748TQ-R Series

- 5 hot-swap SAS/SATA drive bays
  Up to 10 hot-swap 3.5" drive bays
  6 hot-swap cooling fans
  1400W Gold /Platinum Level (94%+) redundant power supplies
- 4U/Tower x 29.4"

MB hassis	H8QG7-LN4F/H8QGi-LN4F H8QG7+-LN4F/H8QGi+-LN4F	H8QG6-F/H8QGi-F H8QG6+-F/H8QGi+-F	H8QGL-6F/H8QGL-iF H8QGL-6F+/H8QGL-iF+	H8QI6-F/H8QIi-F H8QI6+-F/H8QIi+-F
1U	• SC818TQ-1400LPB 1U Heatsink*: SNK-P0042P	• SC818TQ-1400LPB 1U HeatSink*: SNK-P0042P	• SC818TQ-1400B 1U Heatsink*: SNK-P0042P	• SC818TQ-1400B 1U Heatsink*: SNK-P0022+
2U	● SC828TQ+-R1400LPB ● SC828TQ+-R1K43LPB 2U Heatsink*: SNK-P0043P	● SC828TQ+-R1400LPB ● SC828TQ+-R1K43LPB 2U HeatSink*: SNK-P0043P	● SC828TQ+-R1400LPB ● SC828TQ+-R1K43LPB 2U Heatsink*: SNK-P0043P	• SC828TQ+-R1400LPB 2U Heatsink*: SNK-P0023P+
4U	● SC748TQ-R1400B ● SC748TQ-R1K43B ● SC848E16/A-R1K62B ● SC418E16-R1K62B 2U HeatSink*: SNK-P0043P	• SC748TQ-R1400B • SC748TQ-R1K43B • SC848E16/A-R1K62B • SC418E16-R1K62B 2U HeatSink*: SNK-P0043P	• SC748TQ-R1400B • SC748TQ-R1K43B • SC848E16/A-R1K62B • SC418E16-R1K62B 2U HeatSink*: SNK-P0043P	• SC748TQ-R1400B 2U HeatSink*: SNK-P0023P+

- \* Most Optimized Chassis for SuperServer® Configuration
- \* Heatsink & Riser Cards sold separately
- \* The accessories list may not reflect actual items due space limitation, please contact Supermicro sales representatives for more detail information before purchase.











MODEL	H8QM3-2/H8QMi-2 H8QM3-2+/H8QMi-2+	H8QM8-2/H8QME-2 H8QM8-2+/H8QME-2+	H8DGU-LN4F+	H8DGU-F/H8DGU
Processor	6-Core AMD Opteron™ 8000 Series Processors	6-Core AMD Opteron™ 8000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors
Chipset	NVIDIA MCP55-Pro NEC 720400 PCI-X Bridge	NVIDIA MCP55-Pro AMD 8132 PCI-X Tunnel	AMD SR5690+SP5100	AMD SR5670+SP5100
Form Factor	SWTX 16.4" x 13"	SWTX 16" x 13"	Proprietary 12.8" x 16.5"	Proprietary 12.1" x 13"
Optimized Chassis	H8QM3-2+/H8QMi-2+: IU: SC818TQ+-1000LPB** H8QM3-2/H8QMi-2: 2U: SC828TQ-R1200LPB 4U: SC748TQ-R1200B** SC848E16/A-R1K62B**	H8QM8-2+: SC818S+-1000B H8QME-2+: SC818TQ+-1000B H8QM8-2: SC748S-R1000B H8QME-2:SC828TQ-R1200LPB SC748TQ-R1000B SC848TQ-R1800B	1U: SC819TQ-R700UB SC119TQ-R700UB 2U: SC829TQ-R920UB SC219A-R920UB	1U: SC815TQ-720UB/563UB SC113TQ-700UB/563UB 2U: SC825TQ-R720UB SC213A-R900UB SC216A-R900UB SC216E16-R1200UB SC216E26-R1200UB
Memory Capacity & Slots	256GB ECC Registered DDR2 800/667/533 SDRAM in 32 DIMMs*	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs	768GB ECC Registered or 128GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 24 DIMMs	512GB ECC Registered or 128GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 16 DIMMs
Expansion Slots	H8QM3-2/H8QMi-2: 2 PCI-E x16 1 PCI-E x8 1 PCI-E x4 (in x8 slot) 1 64-bit PCI-X 133 SIMLC slot H8QM3-2+/H8QMi-2+: 1 PCI-E x16 SIMLC slot	H8QM8-2/H8QME-2: 2 HyperTransport slot 1 PCI-E x16 1 PCI-E x16 2 PCI-X 133/100 MHz 2 PCI-X 100 MHz SIMSO socket H8QM8-2+/H8QME-2+: 1 HyperTransport slot 1 PCI-E x16 SIMSO socket	IU Left Slot:  1 PCI-E 2.0 x16 and UIO or  2 PCI-E 2.0 x8 or  1 PCI-E 2.0 x8 or  1 PCI-E 2.0 x8 and UIO  2U Left Slot:  2 PCI-E 2.0 x8 and UIO or  3 PCI-E 2.0 x8 or  1 PCI-E 2.0 x8 or  1 PCI-E 2.0 x16 and UIO  2U Right Slot:  3 PCI-E 2.0 (x4 + x1 + x1) (via RSC-R2UU-2E2E4R Riser Card)	IU Left Slot: 1 PCI-E 2.0 xl6 and UIO or 2 PCI-E 2.0 x8 or 1 PCI-E 2.0 x8 or 1 PCI-E 2.0 x8 and UIO 2U Left Slot: 2 PCI-E 2.0 x8 and UIO or 3 PCI-E 2.0 x8 or 1 PCI-E 2.0 x8 or
Onboard SAS/SCSI/ SATA/RAID	LSI® 1068E SAS Controller for 8 SAS ports (H8QM3-2/H8QM3-2+ only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	Adaptec 7902W dual-channel Ultra320 SCSI with host RAID (H8QM8-2/H8QM8-2+ only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	6 SATA2 ports, RAID 0, 1, 10	6 SATA2 ports, RAID 0, 1, 10
RAID Support	AOC-iButton68 (H8QM3-2/H8QM3-2+ only)	AOC-LPZCR1 or AOC-LPZCR2 (H8QM8-2/H8QM8-2+ only)	N/A	N/A
Onboard LAN	Dual LAN with Intel® 82546GB Gigabit Ethernet	Dual LAN with Intel® 82546GB Gigabit Ethernet	Four LAN with two Intel® 82576GB Gigabit Ethernet	Dual LAN with Intel® 82576GB Gigabit Ethernet
Onboard VGA	ATI ES1000 16MB PCI graphics controller	ATI ES1000 16MB PCI graphics controller	Matrox G200eW graphics controller	Matrox G200eW graphics controller
Build-in EIDE/USB Ports	ATA133/100 Up to 4 USB 2.0 ports	ATA133/100 Up to 4 USB 2.0 ports	Up to 7 USB 2.0 ports	Up to 7 USB 2.0 ports
Other Onboard I/O Devices	1 DOM power connector 1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. SIMLC (IPMI 2.0) with KVM and	1 DOM power connector 1 floppy port 2 fast UART 16550 serial port 1 ECP/EEP pa rallel port PS/2 mouse & keyboard conn. SIMSO(+) (IPMI 2.0) with	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. IPMI 2.0 + KVM with dedicated
Manageability	virtual media option, Watch Dog, SuperDoctor III	virtual media option, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	LAN (F version only), Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, 3.3V, +5V, +12V, 5V standby, VBAT, and total of 9-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +5V, +12V, 3.3V, 5V standby, VBAT, and total of 9-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 8-fan status, supports system management utility, mem VTT, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, 1.5V, VBAT, HyperTransport™
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication
Other Features	ACPI power management, internal/ external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/ external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 8 Mb Flash ROM	AMI 8 Mb Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM

<sup>\*</sup> Fully populated DDR2 800/667 memory will be downgraded to DDR2 533 \*\* Please refer to page 9 for extra components needed.







- 600W Platinum Level (94%+) Digital highefficiency power supplies 4x 3.5" hot-swap SAS/SATA drive bays 1x Slim DVD ROM Drive (optional)

- 4x counter-rotating fans
  1x full-size, full-length I/O expansion slot
  Power Switch, Reset Button & 5 LED Indicators
- Full SES2 support with SAS option





#### SC847E16/E26 Series

- Extra high-density 4U storage chassis, up to 36x (24 front + 12 rear) HDD bays Redundant (1+1) 1280W Platinum Level (94%+)
- power supplies with PMBus function Maximum 3.5" hot-swap drives density
- Expander supports SAS
- 7x Low-profile expansion slots; 4FH + 3LP (UIO)
   7x 8cm (middle) Hot-swap cooling

MB Chassis	H8QM3-2/H8QMi-2 H8QM3-2+/H8QMi-2+	H8QM8-2/H8QME-2 H8QM8-2+/H8QME-2+	H8DGU-LN4F+	H8DGU-F/H8DGU
1U	SC818TQ+-1000LPB 1U Heatsink*: SNK-P0022+	SC818TQ+-100LPB 1U Heatsink*: SNK-P0022+	• SC119TQ-R700UB SC819TQ-R700UB 1U Heatsink*: SNK-P0042P	• SC815TQ-563UB • SC815TQ-R700UB • SC113TQ-R700UB • SC113TQ-563UB SC111T-600UB 1U Heatsink*: SNK-P0042P
2U	• SC828TQ+-R1400LPB 2U Heatsink*: SNK-P0023P+	• SC828TQ+-R1400LPB 2U Heatsink*: SNK-P0023P+	• SC829TQ-R920UB SC219A-R920UB 2U HeatSink*: SNK-P0043P	● SC825TQ-R720UB ● SC216E26-R1200UB SC213A-R900UB SC216A-R900UB SC216E16-R1200UB SC825TQ-563UB SC213LTQ-R720UB 2U Heatsink*: SNK-P0043P
<b>4</b> U	SC748TQ-R1400B 2U HeatSink*: SNK-P0023P+	SC748TQ-R1400B 2U Heatsink*: SNK-P0023P+		• SC847E16-R1400UB SC847A-R1400UB SC847E26-R1400UB 2U Heatsink*: SNK-P0043P

- \* Most Optimized Chassis for SuperServer® Configuration
- \* Heatsink & Riser Cards sold separately
- \* The accessories list may not reflect actual items due space limitation, please contact Supermicro sales representatives for more detail information before purchase

#### 12"x 13" LSI 2008 SAS2 **6 PCI-E**

#### 12"x 10" Cost-Effective LSI 2008 SAS2











MODEL	H8DG6-F/H8DG6 H8DGi-F/H8DGi	H8DCL-6F/H8DCL-6 H8DCL-iF/H8DCL-i	H8DM8-2/ H8DME-2	H8DM3-2/ H8DMi-2
Processor	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors
Chipset	Dual AMD SR5690+SP5100	AMD SR5690+SP5100	NVIDIA MCP55-Pro NEC 720400 PCI-X Bridge	NVIDIA MCP55-Pro AMD 8132 PCI-X Tunnel
Form Factor	EATX 12" x 13"	ATX 12" x 10"	EATX 12" x 13.05"	EATX 12" x 13.05"
Optimized Chassis	3U: SC836A-R1200B SC835TQ-R920B	3U: SC835TQ-R920B SC936A-R900B/1200B 4U: SC842TQ-665/865 Mid-tower: SC732i-500B	H8DM8-2: 2U: SC825S2-R700LPB** 3U: SC836S2-R800B 4U: SC745S2-R800B** SC743S1/SC743S2-R760B H8DME-2: 2U: SC825TQ-R700LPB**, SC213A-R900LPB, SC216A-R900LPB 3U: SC836TQ-R800B, SC836E1-R800B 4U: SC745TQ-R800B**, SC743TQ-R760B, SC743T-665B, SC743I-R760B/665B	2U: SC825TQ-R700/720LPB** SC213A-R900LPB SC216A-R900LPB 3U: SC836TQ-R800B SC833T-R760B 4U: SC745TQ-R800B/R920B** SC743TQ/i-R760B/865B
Memory Capacity & Slots		256GB ECC Registered or 64 GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 8 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs
Expansion Slots	3 PCI-E 2.0 x16 1 PCI-E 2.0 x8 2 PCI-E 2.0 x4 (using x8 slot)	1 PCI-E 2.0 x8 (using in x16 slot) 3 PCI-E 2.0 x8 1 PCI-E 2.0 x4 (using in x8 slot) 1 PCI	2 PCI-E x8 2 64-bit PCI-X 133/100 MHz 2 64-bit PCI-X 100 MHz SIMLC slot	2 PCI-E x8 1 PCI-E x4 (using x8 slot) 2 64-bit PCI-X 133/100 MHz 1 64-bit PCI-X 133 MHz SIMLP slot
Onboard SAS/SCSI/ SATA/RAID	(H8DG6(-F) only)	LSI* 2008 SAS2 Controller (H8DCL-6(F) only) 6 SATA2 ports, RAID 0, 1, 10	Adaptec 7902W dual-channel Ultra320 SCSI with host RAID (H8DM8-2 only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	LSI* 1068E SAS Controller (H8DM3-2 only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD
RAID Support	AOC-SAS2-RAID5-KEY (H8DG6(-F) only)	AOC-SAS2-RAID5-KEY (H8DCL-6(F) only)	AOC-LPZCR1 or AOC-LPZCR2 (H8DM8-2 only)	AOC-iButton68 (H8DM3-2 only)
Onboard LAN	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with two Intel® 82574L Gigabit Ethernet	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet	Dual LAN with NVIDIA MCP55- Pro Gigabit Ethernet
Onboard VGA	Matrox G200eW graphics controller	Matrox G200eW graphics controller	ATI ES1000 16MB PCI graphics controller	ATI ES1000 16MB PCI graphics controller
Build-in EIDE/USB Ports	Up to 8 USB 2.0 ports	Up to 7 USB 2.0 ports	Single ATA133/100 Up to 6 USB 2.0 ports	Single ATA133/100 Up to 6 USB 2.0 ports
Other Onboard I/O Devices	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 1 floppy port 1 ECP/EPP parallel port 2 fast UART 16550 serial PS/2 mouse & keyboard conn.
Manageability	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III	SIMLC (IPMI 2.0) with KVM and virtual media option, Watch Dog, SuperDoctor III	SIMLP(+) (IPMI 2.0) with KVM and virtual media option, Watch Dog, SuperDoctor III
PC Health Monitoring	voltage, and total of 8-fan status, supports system management utility,	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 3.3V standby, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 6-fan status, supports system management utility, mem VTT, chassis intrusion header	Monitors CPU core voltages, +1.5V, +3.3V, +5V, +12V, -12V, 5V standby, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage 1.8V, and total of 8-fan status, supports system management utility, mem VTT, MCP55 Vcore, chassis intrusion header	Monitors CPU core voltages, +3.3V, +5V, +12V, -12V, 5V standby, VBAT, and total of 8-fan status, supports system management utility, chassis intrusion header
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication
Other Features	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/ external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/ external modem ring-on, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 8 Mb Flash ROM	AMI 8 Mb Flash ROM

<sup>\*</sup> Fully populated DDR2 800/667 memory will be downgraded to DDR2 533 \*\* Please refer to page 11 for extra components needed.





#### **SC213 Series**

- 16 hot-swap 2.5" SAS/SATA drive bays
- UIO optimized
- Platinum Level (94%+) 740W redundant power supplies with I<sup>2</sup>C mgt. 2U x 25.5"



#### **SC825TQ Series**

- 8 hot-swap SAS/SATA drive bays (SC825TQ)
- Up to 7 low profile expansion cards
  Platinum Level (94%+) 740W high efficiency power supplies with I<sup>2</sup>C mgt. 2U x 25.5"





#### **SC826B Series**

- 920W Redundant Platinum Level (94%+) / 1280W Redundant Platinum Level (94%+) Digital power

- High performance SAS2/Gb/s expander 12x 3.5° hot-swap SAS/SATA drive bays 3x 80mm 4-pin PWM cooling fans Mini-i-pass (SFF 8087) connectivity (multi lane)
- 7x low-profile expansion slots



#### **SC745 Series**

- 8 hot-swap drive bays
- Tower/4U rackmount server chassis
- 7 Tool-less expansion slots
- 90-degree rotatable drive bay module
- 100% cooling redundancy
- Platinum Level (94%+) redundant power supplies with PMBus 4U/Tower x 25.5"





#### **SC836 Series**

- 16 hot-swap SAS(2) drive bays
- Up to 7 expansion slots
  Platinum Level (94%+) 500W/920W redundant power supplies with PM Bus
- 3U x 25.5"



#### **SC743 Series**

- 8 hot-swap drive bays
- 7 Tool-less expansion slots
- 90-degree rotatable drive bay module
- 1200W Platinum Level (94%+) low noise power supply Hot-swap redundant PWM cooling fans
- 4U/Tower x 25.5"

MB	H8DG6-F/H8DG6	H8DCL-6F/H8DCL-6	H8DME-2	H8DM3-2/
Chassis	H8DGi-F/H8DGi	H8DCL-iF/H8DCL-i	H8DM8-2	H8DMi-2
1U				
2U	SC216A-R900LPB SC216E16-R1200LPB SC216E26-R1200LPB SC825TQ-R720LPB SC825TQ-563LPB SC213A-R900LPB SC826BA-R920LPB SC826BE16-R920LPB SC826BE15-R920LPB SC213A-R740LPB 2U HeatSink*: SNK-P0043P	SC823TQ-653B SC825TQ-R600LPB SC826TQ-R500LPB SC826E16-R500LPB SC213LT-600LPB 2U HeatSink*: SNK-P0048AP4 + BKT-0048L-C32	● SC825TQ-R700LPB SC216A-R900LPB SC216E16-R1200LPB SC216E26-R1200LPB SC825TQ-R720LPB SC825TQ-F720LPB SC213A-R900LPB 2U HeatSink*: SNK-P0023P	● SC825TQ-R700LPB SC216A-R900LPB SC216E16-R1200LPB SC216E26-R1200LPB SC825TQ-R720LPB SC825TQ-F720LPB SC825TQ-563LPB SC213A-R900LPB 2U HeatSink*: SNK-P0023P
3U/ Mid-Tower	SC835TQ-R920B SC836A-R1200B SC836E16-R1200B SC836E26-R1200B SC836BA-R920B SC836BE-R920B SC836BE26-R920B SC836BE26-R920B 2U HeatSink*: SNK-P0043P	SC833T-653B SC732I-500B SC836TQ-R500B SC836E16-R500B 2U HeatSink*: SNK-P0048AP4 + BKT-0048L-C32	SC835TQ-R920B SC836TQ-R800B SC836A-R1200B SC836E16-R1200B SC836E26-R1200B 2U HeatSink*: SNK-P0023P	SC835TQ-R920B SC836TQ-R800B SC836A-R1200B SC836E16-R1200B SC836E26-R1200B 2U HeatSink*: SNK-P0023P
<b>4</b> U	• SC745TQ-R920B SC745TQ-R1200B SC743TQ-665B SC743TQ-865B SC747TG-R1620B(-SQ) 2U HeatSink*: SNK-P0043P	SC745TQ-R920B SC743TQ-665B SC743TQ-865B SC842TQ-865B SC842TQ-665B 2U HeatSink*: SNK-P0024AP4	● SC745TQ-R800B SC745TQ-R920B SC743TQ-665B SC743TQ-865B 2U HeatSink*: SNK-P0023P	SC745TQ-R800B     SC745TQ-R920B     SC743TQ-665B     SC743TQ-865B     2U HeatSink*: SNK-P0023P

- \* Most Optimized Chassis for SuperServer® Configuration
- \* Heatsink & Riser Cards sold separately
- \* The accessories list may not reflect actual items due space limitation, please contact Supermicro sales representatives for more detail information before purchase











MODEL	H8DI3+-F/H8DI3+ H8DIi+-F/H8DIi	H8DA6+-F/H8DA6+ H8DAi+-F/ H8DAi+	H8DA3-2/ H8DAi-2	H8DAE-2
Processor	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors
Chipset	AMD SR5690+SP5100 NEC 720400 PCI-X Bridge	Dual AMD SR5690+SP5100	NVIDIA MCP55-Pro + IO55	NVIDIA MCP55-Pro + IO55 NEC 720400 PCI-X Bridge
Form Factor	EATX 12" x 13"	EATX 13.68" x 13.05"	EATX 12" x 13.05"	EATX 12" x 13.05"
Optimized Chassis	2U: SC825TQ-R720LPB** SC213A-R900LPB SC213E1-R900LPB SC216A-R900LPB 3U: SC836A-R1200B SC835TQ-R920B 4U: SC745TQ-R800B** SC745TQ-920B SC743TQ-865B	4U: SC747TG-R1400B-SQ SC745TQ-R800B/R920B	4U: SC743TQ-665B Mid-Tower: SC732i-865B	3U: SC833S-550 SC833S-R760 SC833S2-550 SC833S2-R760 SC933S1-R760 SC933S2-R760 4U: SC743S1-R760, SC743S2-R760
Memory Capacity & Slots	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs
Expansion Slots	2 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x4 (using x8 slot) 1 PCI-E x8 2 64-bit PCI-X 133/100 MHz	4 PCI-E 2.0 x16 2 PCI-E 2.0 x4 (using x8 slots) 1 32-bit PCI	2 PCI-E x16 1 PCI-E x8 (using x16 slot) 2 PCI-E x4 (using x8 slots) 1 32-bit PCI 1 SIMLP slot	2 PCI-E x16 1 PCI-E x8 1 PCI-E x4 (using x8 slot) 1 64-bit 133MHz PCI-X 1 64-bit 100MHz PCI-X 1 SIMLP slot
Onboard SAS/SCSI/ SATA/RAID	LSI® 1068E SAS Controller (H8DI3+ only) 6 SATA2 ports, RAID 0, 1, 10	LSI* 2008 SAS2 Controller for 8 SAS2/ SATA ports (H8DA6+ only) 6 SATA2 ports, RAID 0, 1, 10	LSI 1068E SAS Controller (H8DA3-2 only) NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD
RAID Support	AOC-iButton68 (H8DI3+ only)	AOC-SAS2-RAID5-KEY (H8DA6+(-F) only)	AOC-iButton68 (H8DA3-2 only)	AOC-LPZCR1
Onboard LAN	Dual LAN with two Intel® 82574L Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet
Onboard VGA	Matrox G200eW graphics controller	Matrox G200eW graphics controller	N/A	N/A
Build-in EIDE/USB Ports	Single ATA133/100 Up to 6 USB 2.0 ports	Single ATA133/100 Up to 10 USB 2.0 ports	Single ATA133/100 Up to 8 USB 2.0 ports	Single ATA133/100 Up to 8 USB 2.0 ports
Other Onboard I/O Devices	1 DOM power connector 1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 DOM power connector 2 fast UART 16550 serial ports 2 IEEE 1394 single port w/ header PS/2 mouse & keyboard conn. HD Audio Front-side audio header	1 DOM power connector 1 floppy port 1 ECP/EPP parallel port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. ALC883 audio CODEC high def7.1- channel sound Front-side audio header	1 DOM power connector 1 floppy port 1 ECP/EPP parallel port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn. ALC883 audio CODEC high def7.1- channel sound Front-side audio header
Manageability	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III	SIMLP(+) (IPMI 2.0) with virtual media option, Watch Dog, SuperDoctor III	SIMLP(+) (IPMI 2.0) with virtual media option, Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, +3.3V, +5V, +12V, +3.3V standby, and total of 6-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, 5V standby, VBAT, and total of 8-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, 5V standby, VBAT, and total of 8-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, 5V standby, VBAT, and total of 8-fan status, supports system management utility, chassis intrusion header
Thermal Control	Fan speed control & overheat LED indication	PWM Fan speed control & overheat LED indication	PWM Fan speed control & overheat LED indication	PWM Fan speed control & overheat LED indication
Other Features	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, internal/ external modem ring-on, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, internal/ external modem ring-on, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, internal/ external modem ring-on, WOL, control of power-on mode for recovery from AC power loss & S3 STR support
BIOS	AMI 16 Mb SPI Flash ROM	AMI 8 Mb Flash ROM	AMI 8 Mb Flash ROM	AMI 8 Mb Flash ROM

<sup>\*</sup> Fully populated DDR2 800/667 memory will be downgraded to DDR2 533.
\*\* Please refer to page 13 for extra components needed.







#### **SC745 Series**

- 920W high-efficiency Platinum Level (94%+) redundant power supplies
- GPU support
- As SAS/SATA hot-swap drive bays
  Adjustable air shroud for flexible
  configurations
  100% cooling redundancy
  Rack mount / tower convertible

- 2x front USB ports Locking bezel with filter
- Tool-less operation
- Full SES2 support



- SC743 Series8 hot-swap drive bays7 Tool-less expansion slots
- 7 Tool-less expansion slots 90-degree rotatable drive bay module 1200W Platinum Level (94%+) low noise power supply Hot-swap redundant PWM cooling fans 4U/Tower 17.8" x 7" x 25.5"

MB Chassis	H8DI3+-F/H8DI3+ H8DIi+-F/H8DIi	H8DA6+-F/H8DA6+ H8DAi+-F/ H8DAi+	H8DA3-2/ H8DAi-2	H8DAE-2
2U	SC825TQ-R720LPB SC825TQ-563LPB SC213A-R900LPB SC216A-R900LPB SC216E16-R1200LPB SC216E26-R1200LPB 2U HeatSink*: SNK-P0023P			
3U/ Mid-Tower	SC836A-R1200B SC836E16-R1200B SC836E26-R1200B SC833T-653B SC835TQ-R800B 2U HeatSink*: SNK-P0023P			
<b>4</b> U	SC743T-665B SC743TQ-865B SC745TQ-R920B SC745TQ-R1200B 2U HeatSink*: SNK-P0023P	• SC747TG-R1400B-SQ SC745TQ-R800B/800B SC745TQ-R920B 3U HeatSink*: SNK-P0024AP4	SC743T-665B SC743TQ-865B 3U HeatSink*: SNK-P0024AP4	SC743T-665B SC743TQ-865B 3U HeatSink*: SNK-P0024AP4

- \* Most Optimized Chassis for SuperServer® Configuration
- \* Heatsink & Riser Cards sold separately
- \* The accessories list may not reflect actual items due space limitation, please contact Supermicro sales representatives for more detail information before purchase













MODEL	H8SML-7F/H8SML-7 H8SML-iF/H8SML-i	H8SME-F	H8SMA-2/H8SMi-2	H8SSL-i2	H9SKV-420
Processor	8/4-Core AMD Opteron™ 3000 Series Processors	8/4-Core AMD Opteron™ 3000 Series Processors	Quad-Core AMD Opteron™ 1000 Series Processors	Quad-Core AMD Opteron™ 1000 Series Processors	Quad-Core AMD GX-420CA
Chipset	AMD SR5650+SP5100	AMD SR5650+SP5100	NVIDIA MCP55-Pro	ServerWorks HT1000	System on Chip
Form Factor	microATX 9.6" x 9.6"	Proprietary 4.6" x 11.7"	ATX 12" x 9.6"	ATX 12" x 8"	Mini-ITX 6.7" x 6.7"
Optimized Chassis	Mini 1U: SC512F-350B 1U: SC813MTQ-350CB SC811TQ-350B SC113MTQ-330CB	3U: SC939H-R1K63B	H8SMi-2: 1U: SC512F-260 SC811T-300 H8SMA-2: Mid-Tower: SC733TQ/T/i- 665B, SC733T-500B	1U: SC512F-260 SC811T-300 Mid-Tower: SC733TQ/T/i-665 SC732D2-865B SC732i-500B	Mini-ITX: SC101i
Memory Capacity & Slots	32GB unbuffered ECC/non- ECC DDR3 1600/1333/1066 SDRAM in 4 DIMMs	32GB unbuffered ECC/ non-ECC VLP DDR3 1600/1333/1066 SDRAM in 4 DIMMs	8GB ECC/non-ECC Unbuffered DDR2 800/667/533 SDRAM in 4 DIMMs	8GB ECC/non-ECC Unbuffered DDR2 800/667/533 SDRAM in 4 DIMMs	16GB Unbuffered non-ECC, DDR3-1600 MHz SDRAM in 2 DIMMs
Expansion Slots	H8SML-7(F): 1 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x4 (using x8 slot) H8SML-i(F): 1 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x4 (using x8 slot) 1 PCI-E 2.0 x4 (using x8 slot) 1 PCI-E 2.0 x8	1 Micro LP PCI-E 2.0 x8	1 PCI-E x16 1 PCI-E x8 (using x16 slot) 1 PCI-E x4 (using x8 slot) 3 32-bit PCI 1 SIMLP slot (H8SMi-2 only)	1 64-bit PCI-X 133MHz 2 32-bit PCI 1U/LP IPMI slot	1 PCI-E 2.0 x4 1 mini-PCI-E 1 mSATA
Onboard SAS/SCSI/ SATA/RAID	LSI 2308 SAS2 Controller for 8 SAS2 ports, SW RAID 0, 1, 10 (H8SML-7(F) only) 6 SATA2 ports, RAID 0, 1, 10	4 SATA2 ports, RAID 0, 1, 10	NVIDIA MCP55-Pro for 6 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	ServerWorks HT1000 for 4 SATA ports	2 SATA3 ports
RAID Support	N/A	N/A	N/A	N/A	N/A
Onboard LAN	Dual LAN with two Intel® 82574L Gigabit Ethernet	N/A	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet	Dual LAN with Broadcom 5704 Gigabit Ethernet	Dual LAN with two Intel i210 Gigabit Ethernet
Onboard VGA	Matrox G200eW graphics	Matrox G200eW graphics	ATI ES1000 16MB PCI graphics controller (H8SMi-2 only)	ATI ES1000 16MB PCI graphics controller	2 HDMI 1 VGA 1 24bit 2CH LVDS (Optional)
Build-in EIDE/USB Ports	Up to 7 USB 2.0 ports	2 USB 2.0 ports (via KVM connector)	Single ATA133/100 Up to 8 USB 2.0 ports (H8SMA-2 only)	Single ATA100 Up to 6 USB 2.0 ports	Up to 2 USB 3.0 ports Up to 6 USB 2.0 ports
Other Onboard I/O Devices	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 fast UART 16550 serial port (via KVM connector)	1 DOM power connector 1 floppy port 1 ECP/EPP parallel port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 floppy port 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	HD Audio 6 COM Ports 1 SATA DOM power connector
Manageability	IPMI 2.0 + KVM with dedicated LAN (-F versions), Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	IPMI 2.0, Watch Dog, SuperDoctor III	IPMI 2.0, Watch Dog, SuperDoctor III	Watch Dog, SuperDoctor 5
PC Health Monitoring	Monitors CPU core voltages, +3.3V, +5V, +12V, +3.3V standby, and total of 5-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +3.3V, +5V, +12V, +3.3V standby, supports system management utility	Monitors CPU core voltages, CPU 4-phase-switching voltage regulator, 3.3V, +5V, +12V, 5V standby, and total of 5-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +5V, +12V, -12V, 5.5V standby, 2.5V standby, VBAT, and total of 5-fan status, supports system management utility, chassis intrusion header	Monitors CPU voltages, +12V, +5V, +3.3V, +3.3V standby, Chassis intrusion header, VBAT, Supports system management utility
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	3 fan header, 4-pin type of fan header, Overheat LED indication, PWM fan speed control
Other Features	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, internal/external modem ring- on, WOL, control of power-on mode for recovery from AC power loss & S3 STR support (H8SMA-2 only)	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection
BIOS	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 4 Mb Flash ROM	AMI 4 Mb Flash ROM	AMI 32 Mb SPI Flash ROM

 $<sup>{\</sup>it **Please refer to page 15 for extra components needed}.$ 





#### **SC113 Series**

- 8 hot-swap 2.5" drive bays
- High density slim 1U rackmount
- Tigil density still 10 rackmount
   560W/700W power supply with I<sup>2</sup>C mgt.

   Platinum Level (94%+) 600W digital switching power supply; Redundant 500W Platinum Level (94%+) / 700W Gold Level power supplies available

   The 20 EVD.
- 1U x 23.5"D





#### **SC815 Series**

- 4 hot-swap drive bays
- High density slim 1U rackmount
- 560W power supply with I<sup>2</sup>C mgt.
  600W Platinum Level (94%+) digital switching power supply; Redundant 500W Platinum Level (94%+) / 700W Gold Level power supplies available IU x 25.6"D





#### **SC813M Series**

- 440W Platinum Level (94%+) / 350W Gold Level highefficiency power supply 4x 3.5" hot-swap SAS/SATA drive bays 1x slim DVD/CD-ROM drive (optional)

- 4x 4cm high performance cooling fans
- 1x Full-height I/O expansion slot 2x Front USB ports





#### **SC823 Series**

- 650W Gold Level high-efficiency power supply
  6x 3.5" Hot-swap SAS/SATA drive bays
  1x 5.25" peripheral drive bay
  1x slim DVD-ROM drive (optional)
  4x 80mm 6300 RPM Fans

- 7x low-profile, full-length I/O expansion slots
- Power Switch & 6 LED Indicators





#### **SC512F Series**

- 440W Platinum Level (94%+) / 350W Gold Level high-efficiency power supply
- 2x 3.5" internal HDDs (optional)
  1x slim DVD-ROM drive (optional)
- 2x counter-rotating fans
- 1x I/O expansion slot
- 2x front USB ports





#### SC504/505 Series

- 9.8" depth small form factor 1U, 200W power supply Optimized for Mini-ITX (6.75" x 6.75") motherboard
- 200W Gold Level high-efficiency SC504: Rear I/O access;
- SC505: Front I/O access

MB Chassis	H8SML-7F/H8SML-7 H8SML-iF/H8SML-i	H8SME-F	H8SMA-2/H8SMi-2	H8SSL-i2	H9SKV-420
1U / Embedded Compact Chassis	● SC813MT-350CB ● SC813MTQ-350CB SC512L-200B SC512F-350B SC113MTQ-563CB SC813MTQ-441CB SC813MTQ-R440CB SC512F-441B SC811TQ-R441B SC113MTQ-330CB 1U HeatSink*: SNK-P0026			● SC512F-260B SC813MT-350CB SC813MTQ-350CB SC512L-200B SC512F-350B SC113MTQ-563CB SC813MTQ-441CB SC813MTQ-440CB SC113MTQ-330CB 1U HeatSink*: SNK-P0026	SC101i SC504-203B SC505-203B
3U / Mid-Tower	SC833T-653B SC733TQ-665B SC733i-500B 3U HeatSink*: SNK-P0027AP4+3U(+) Active	• SC939H-R1K63B 1U HeatSink*: SNK-P0047PSR	SC733TQ-665B SC733i-500B SC733T-500B 3U HeatSink*: SNK-P0027AP4	SC833T-653B SC733TQ-665B SC733i-500B 3U HeatSink*: SNK-P0027AP4	
<b>4</b> U	SC842TQ-865B SC842TQ-665B SC842I-500B SC743T-665B SC743TQ-865B 3U HeatSink*: SNK-P0027AP4		SC743T-665B SC743TQ-865B 3U HeatSink*: SNK-P0027AP4	SC842TQ-865B SC842TQ-665B SC842I-500B SC743T-665B SC743TQ-865B 3U HeatSink*: SNK-P0027AP4	

<sup>\* ●</sup> Most Optimized Chassis for SuperServer® Configuration

<sup>\*</sup> Heatsink & Riser Cards sold separately

<sup>\*</sup> The accessories list may not reflect actual items due space limitation, please contact Supermicro sales representatives for more detail information before purchase













MODEL	H8SGL-F/H8SGL	H8SCM-F/H8SCM	H8DGG-QF	H8DGT-HLF/ H8DGT-HLIBQF	H8DGT-HF/ H8DGT-HIBQF
Processor	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors
Chipset	AMD SR5650+SP5100	AMD SR5650+SP5100	Dual AMD SR5690+SP5100	AMD SR5690+SP5100	AMD SR5670+SP5100
Form Factor	ATX 12" x 8"	microATX 9.6" x 8.6"	Proprietary 7.74" x 16.64"	Proprietary 6.8" x 16.64"	Proprietary 6.8" x 16.64"
Optimized Chassis	Mini 1U: SC512F-350B 1U: SC813MTQ-350CB SC8113MTQ-350B SC113MTQ-330CB	Mini 1U: SC512F-350B 1U: SC813MTQ-350CB SC811TQ-350B SC111LT-330CB/360CB SC113MTQ-330CB Mini-Tower: SC731D/i-300B	IU: SC818G-1400** SC818G-R1400	2U: SC827H-R1400B** SC827H-R1620B** SC827HD-R1400B SC217HQ-R1620B	2U: SC827H-R1400B** SC827H-R1620B** SC827HD-R1400B SC217HQ-R1600B
Memory Capacity & Slots	256GB ECC Registered or 64GB unbuffered ECC/non- ECC DDR3 1600/1333/1066 SDRAM in 8 DIMMs	128GB ECC Registered or 32GB unbuffered ECC/non- ECC DDR3 1600/1333/1066 SDRAM in 4 DIMMs	512GB ECC Registered or 128GB unbuffered ECC/non- ECC DDR3 1600/1333/1066 SDRAM in 16 DIMMs	256GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1866/1600/1333/1066 SDRAM in 8 DIMMs	512GB ECC Registered or 128GB unbuffered ECC/non- ECC DDR3 1600/1333/1066 SDRAM in 16 DIMMs
Expansion Slots	1 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x8 1 PCI-E x4 (using x8 slot) 3 32-bit PCI	1 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x8 1 PCI-E 2.0 x4 (using x8 slot) 1 32-bit PCI	3 PCI-E 2.0 x16 2 PCI-E 2.0 x8 (using x16 slot)	1 PCI-E 2.0 x16 1 PCI-E 2.0 x8 (using x4 slot) for SAS daughter board support	1 PCI-E 2.0 x16
Onboard SAS/SCSI/ SATA/RAID	6 SATA2 ports, RAID 0, 1, 10	6 SATA2 ports, RAID 0, 1, 10	6 SATA2 ports, RAID 0, 1, 10	6 SATA2 ports, RAID 0, 1, 10 (via daughter board)	6 SATA2 ports, RAID 0, 1, 10 (via daughter board)
RAID Support	N/A	N/A	N/A	N/A	N/A
Onboard LAN	Dual LAN with two Intel® 82574L Gigabit Ethernet	Dual LAN with two Intel® 82574L Gigabit Ethernet	Dual LAN with Intell® 82576 Gigabit Ethernet	Dual LAN with Intell® 82576 Gigabit Ethernet	Dual LAN with Intell® 82576 Gigabit Ethernet
Onboard VGA	Matrox G200eW graphics	Matrox G200eW graphics	Matrox G200eW graphics	Matrox G200eW graphics	Matrox G200eW graphics
Build-in EIDE/USB Ports	Single ATA133/100 Up to 8 USB 2.0 ports	Single ATA133/100 Up to 7 USB 2.0 ports	Up to 4 USB 2.0 ports	Up to 5 USB 2.0 ports	Up to 5 USB 2.0 ports
Other Onboard I/O Devices	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	1 SATA DOM power connector TPM header 2 fast UART 16550 serial ports PS/2 mouse & keyboard conn.	2 fast UART 16550 serial ports TPM header	2 fast UART 16550 serial ports TPM header H8DGT-HLIBQF: Mellanox Connect-X2 QDR 40Gbps InfiniBand	2 fast UART 16550 serial ports TPM header Mellanox Connect-X2 40Gbps InfiniBand (H8DGT- HIBQF only)
Manageability	IPMI 2.0 + KVM with dedicated LAN (-F version), Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (-F version), Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, +3.3V standby, and total of 6-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, +3.3V standby, VBAT and total of 5-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, -12V, 1.5V, 3.3V standby, VBAT, HyperTransport <sup>150</sup> technology voltage 1.2V, memory voltage, and total of 8-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, +1.8V, +3.3V, +5V, +12V, 3.3V standby, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 4-fan status, supports system management utility	Monitors CPU core voltages, 1.8V, 3.3V, +5V, +12V, -12V, 1.5V, VBAT, HyperTransport** technology voltage 1.2V, memory voltage, and total of 4-fan status, supports system management utility
Thermal Control	Fan speed control & overheat LED indication	Fan speed control & overheat LED indication	PWM Fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication
Other Features	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, WOL, control of power-on mode for recovery from AC power loss & S3 STR support	ACPI power management, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM

<sup>\*\*</sup> Please refer to page 17 for extra components needed.







#### SC818G-1400B

- Optmized for GPU, supports up to 2 GPU cards
- 3 hot-swap drive bays
- Gold Level 1400W power supply
- 8 high performance counter rotating fans 1U x 28.2"



- SC113M Series
  1U short-depth 2.5" HDD chassis with compact size 19.98" depth redundant power supplies
  8x 2.5" SAS2 (6Gb/s)/SATA hot-swap drive bays
  (1+1) redundant 400W Gold Level power supply
  (20W Cold Level pixels power supply)
- 330W Gold Level single power supply
- Supports microATX & ATX motherboards Optimized for X9SCL, X9SCM, H8SCM
- 4x 40x28mm high performance cooling fans
- 1 full-height expansion slot





#### **SC217HQ Series**

- Hot-swappable module design for easy system upgrade, installation and maintenance
- 4x Hot-swap motherboard modules in 2U space, supports X8DTT-H(+)
- motherboards Redundant (1+1) 1620W Platinum Level (94%+) power supply with PMBus function
- 24x 2.5" hot-swap SAS/SATA HDD (6x per node) with SESII support
- 4x 80mm heavy duty fans with PWM fan speed control



#### **SC827H Series**

- Hot-swappable module design for easy system upgrade, installation and maintenance
- 2x swappable motherboard modules supports X8DTT-H(+) motherboards
- Redundant (1+1) 1620W Platinum Level (94%+) power supply with PMBus support 12x 3.5" hot-swap SATA drive trays (6x per 1U server node)
- 4x 80mm heavy duty fans with PWM fan speed control

MB Chassis	H8SGL-F/H8SGL	H8SCM-F/H8SCM	H8DGG-QF	H8DGT-HLF/ H8DGT-HLIBQF	H8DGT-HF/ H8DGT-HIBQF
1U	● SC813MTQ-350CB SC512F-350B SC113MTQ-563CB SC813MTQ-441CB SC813MTQ-440CB SC512F-441B SC811TQ-R441B SC113MTQ-330CB 1U HeatSink*: SNK-P0042P	● SC512F-350B ● SC113MTQ-563CB ● SC813MTQ-350CB SC813MTQ-441CB SC813MTQ-4400CB SC512F-441B SC811TQ-441B SC113MTQ-330CB 1U HeatSink*: SNK-P0022+	• SC818G-1400B • SC118G-1400B 1U HeatSink*: SNK-P0042P		
<b>2U</b>		● SC825TQ-720LPB ● SC213LT-563LPB SC825TQ-R740LPB SC213A-R740LPB SC213LT-600LPB SC823TQ-653B 2U HeatSink*: SNK-P0048AP4 + BKT0048L-C32		• SC827H-R1620B • SC217HD-R1620B • SC217HQ-R1620B • SC27HD-R1400B 1U HeatSink*: SNK-P0037P	• SC827H-R1620B • SC217HD-R1620B • SC217HQ-R1620B • SC827HD-R1400B 1U HeatSink*: SNK-P0042P
3U / Mid-Tower		SC833T-653B SC733TQ-665B SC733i-500B 3U HeatSink*: SNK-P0024AP4			
<b>4</b> U	SC842TQ-865B SC842TQ-665B SC842I-500B SC743TQ-865B-SQ SC745TQ-R920B SC745TQ-920B 4U HeatSink*: SNK-P0050AP4 + BKT-0050L-G34	SC842TQ-865B SC842TQ-665B SC842I-500B SC743TQ-865B-SQ SC745TQ-R920B SC745TQ-920B 3U HeatSink*: SNK-P0024AP4			

<sup>\* ●</sup> Most Optimized Chassis for SuperServer® Configuration

<sup>\*</sup> Heatsink & Riser Cards sold separately

<sup>\*</sup> The accessories list may not reflect actual items due space limitation, please contact Supermicro sales representatives for more detail information before purchase













MODEL	H8DCT-HLN4F	H8DCT-HIBQF	H8DCT-F/ H8DCT-IBQF	H8DMT-INF+/ H8DMT+	H8DMT-IBXF/H8DMT-IBX H8DMT-IBX/H8DMT-F/ H8DMT
Processor	8/6/4-Core AMD Opteron™ 4000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors
Chipset	AMD SR5670+SP5100	AMD SR5690+SP5100	AMD SR5670+SP5100	NVIDIA MCP55V-Pro	NVIDIA MCP55-Pro
Form Factor	Proprietary 6.8" x 16.64"	Proprietary 6.8" x 16.64"	Proprietary 6.5" x 16.64"	Proprietary 6.8" x 16.64"	Proprietary 6.5" x 16.4"
Optimized Chassis	2U: SC827H-R1400B** SC827H-R1620B** SC827HD-R1400B SC217HQ-R1620B	2U: SC827H-R1400B** SC827H-R1620B** SC827HD-R1400B SC217HQ-R1620B	1U: SC808T-780B** SC809TQ-780B** 2U: SC827H-R1400B** SC827H-R1620B**	1U: SC808T-980B** SC809T-980B**	1U: SC808T-780B** SC809T-780B**
Memory Capacity & Slots	192GB ECC Registered or 64GB unbuffered ECC/non- ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs	192GB ECC Registered or 64GB unbuffered ECC/non- ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs	192GB ECC Registered or 64GB unbuffered ECC/non- ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs
Expansion Slots	1 PCI-E 2.0 x16 for PCI-E riser card expansion 1 PCI-E 2.0 x8 (using x4 slot) for SAS daughter board support	1 PCI-E 2.0 x16 for PCI-E riser card expansion 1 PCI-E 2.0 x8 (using x4 slot) for SAS daughter board support	1 PCI-E 2.0 x16	1 PCI-E x16 SIMSO socket	1 PCI-E x16
Onboard SAS/SCSI/ SATA/RAID	6 SATA2 ports, RAID 0, 1, 10 (via daughter board)	6 SATA2 ports, RAID 0, 1, 10 (via daughter board)	4 SATA2 ports, RAID 0, 1, 10	NVIDIA MCP55V-Pro for 4 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD	NVIDIA MCP55V-Pro for 4 SATA2 ports, RAID 0, 1, 0+1, 5, JBOD
RAID Support	N/A	N/A	N/A	N/A	N/A
Onboard LAN	Quad LAN with Intel® i350 Gigabit Ethernet	Dual LAN with Intel® i350 Gigabit Ethernet	Dual LAN with Intel® 82576 Gigabit Ethernet	Dual LAN with NVIDIA MCP55V-Pro Gigabit Ethernet	Intel® 82575 Dual-port GbE controller w/ VMDq support
Onboard VGA	Matrox G200eW graphics	Matrox G200eW graphics	Matrox G200eW graphics	XGI Z9S 32MB graphics controller	Matrox G200eW graphics
Build-in EIDE/USB Ports	Up to 4 USB 2.0 ports	Up to 4 USB 2.0 ports	Up to 4 USB 2.0 ports	Up to 6 USB 2.0 ports	Up to 6 USB 2.0 ports
Other Onboard I/O Devices	1 fast UART 16550 serial ports TPM header	1 fast UART 16550 serial ports TPM header Mellanox Connect-X2 IB with QSFP connector InfiniBand	2 fast UART 16550 serial ports TPM header Mellanox Connect-X2 40Gbps InfiniBand (H8DCT- IBQF only)	2 fast UART 16550 serial ports Mellanox InfiniHost III MT25204 20Gbps InfiniBand (H8DMT-INF+ only)	2 fast UART 16550 serial ports Mellanox Connect-X MT25408A0-FCC-DI 20Gbps InfiniBand (H8DMT-IBX(F) only)
Manageability	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN, Watch Dog, SuperDoctor III	SIMSO(+) IPMI 2.0 (H8DMT-INF+/H8DMT+ only), KVM and VM options, Watch Dog, SuperDoctor III	IPMI 2.0 + KVM with dedicated LAN (F version only), Watch Dog, SuperDoctor III
PC Health Monitoring	Monitors CPU core voltages, +1.8V, +3.3V, +5V, +12V, 3.3V standby, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 4-fan status, supports system management utility	Monitors CPU core voltages, +1.8V, +3.3V, +5V, +12V, 3.3V standby, VBAT, HyperTransport <sup>14</sup> technology voltage 1.2V, memory voltage, and total of 4-fan status, supports system management utility	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 1.5V, VBAT, HyperTransport™ technology voltage 1.2V, memory voltage, and total of 4-fan status, supports system management utility	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 5V standby, 1.5V, VBAT, HyperTransport <sup>w</sup> technology voltage 1.2V, memory voltage 1.8V, and total of 4-fan status, supports system management utility, chassis intrusion header	Monitors CPU core voltages, 3.3V, +5V, +12V, -12V, 5V standby, 1.5V, VBAT, HyperTransport <sup>tw</sup> technology voltage 1.2V, memory voltage 1.8V, and total of 8-fan or 4-fan status, supports system management utility, chassis intrusion header
Thermal Control	Fan speed control or PWM fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication	Fan speed control or PWM fan speed control & overheat LED indication
Other Features	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss	ACPI power management, internal/external modem ring-on, WOL, control of power-on mode for recovery from AC power loss
BIOS	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 16 Mb SPI Flash ROM	AMI 8 Mb Flash ROM	AMI 8 Mb SPI Flash ROM

<sup>\*</sup> Fully populated DDR2 800/667 memory will be downgraded to DDR2 533.
\*\* Please refer to page 19 for extra components needed.





#### **SC808 Series**

- 1200W Gold Level certified power supply 2x 3.5" hot-swap SAS/SATA drive bays per system node
- 3x counter-rotating Fans
- 1x Low-profile slot
  Power switch, reset button





#### **SC809 Series**

- 1200W Gold Level certified power supply 4x Hot-swap 2.5" SAS/SATA HDD per system

- Low profile expansion slot 3x 4cm counter-rotating fans Supports Twin motherboard size



#### **SC827 Series**

- Hot-swappable module design for easy system upgrade, installation and maintenance
- maintenance
  2x swappable motherboard modules supports X8DTT-H(+) motherboards
  Redundant (1+1) 1620W Platinum Level (94%+) power supply with PMBus support
  12x 3.5" hot-swap SATA drive trays (6x per 1U server node)
  4x 80mm heavy duty fans with PWM fan speed control



#### **SC217 Series**

- 1620W Redundant (1+1) Platinum Level (94%+) power supplies with PMBus support Hot-swappable module design for easy system upgrade, installation and maintenance
- 4x Hot-swap motherboard modules in 2U space, supports X9DRT-H series motherboards 24x 2.5" hot-swap SAS/SATA HDD (6x per node) with SESII support
- 4x 80mm heavy duty fans with PWM fan speed control

MB Chassis	H8DCT-HLN4F	H8DCT-HIBQF	H8DCT-F/ H8DCT-IBQF	H8DMT-INF+ / H8DMT+	H8DMT-IBXF/H8DMT-IBX H8DMT-IBX/H8DMT-F/ H8DMT
1U			• SC808T-1200B SC809T-1200B 1U Heatsink*: SNK-P0022+	SC808T-980B 1U Heatsink*: SNK-P0022+	SC808T-780B 1U heatsink*: SNK-P0022+
2U	• SC827H-R1620B • SC217HD-R1620B • SC217HQ-R1620B • SC827HD-R1400B 1U HeatSink*: SNK-P0037P MCP-240-82709-0N (required)	• SC827H-R1400B/R1620B • SC217HQ-R1400B/R1620B 1U Heatsink*: SNK-P0037P	SC827H-R1400B IU Heatsink*: SNK-P0022+		• SC827H-R1400B 1U Heatsink*: SNK-P0022+

- \* Most Optimized Chassis for SuperServer® Configuration
- \* Heatsink & Riser Cards sold separately
- \* The accessories list may not reflect actual items due space limitation, please contact Supermicro sales representatives for more detail information before purchase

#### G34 1U 32 DIMMs 4-Way

#### G34 1U 16 DIMMs 1866 Mhz support 4-Way

# *G34 1U 3.5" HDD GPU*









MODEL	A+ Server 1042G-TF	A+ Server 1042G-LTF	A+ Server 1022GG-TF
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors
Key Applications	High performance computer cluster (HPCC) Virtualization server, online transaction processing	High performance computer cluster (HPCC) Virtualization server, online transaction processing	Specialized HPC cluster nodes, medical imaging, oil and gas simulation, quantum chemistry, financial simulation, astrophysics
Outstanding Features	1U 4-way system (64-cores)     3 hot-swap 3.5" SATA drive bays     RAID 0, 1     1 Low-profile PCI-E x16 slot     ITB DDR3 1600/1333/1066/SDRAM     2 Gigabit Ethernet ports     IPMI 2.0 management with dedicated LAN     1400W Gold Level high-efficiency power supply	IU 4-way system (64-cores) 3 hot-swap 3.5" SATA drive bays RAID 0, 1 1 PCI-E x16 slot 512GB DDR3 1866/1600/1333/1066 SDRAM 2 Gigabit Ethernet ports IPMI 2.0 management with dedicated LAN 1400W Gold Level high-efficiency power supply	Supports up to 2 GPU cards  512GB DDR3 1600/1333/1066 SDRAM  3 hot-swap 3.5" SATA drive bays  RAID: 0, 1  2 Gigabit Ethernet ports  IPMI 2.0 management  1400W Gold Level high-efficiency power supply
Serverboard/Chipset	H8QGi+-F / HyperTransport™ technology AMD SR5690+SP5100	H8QGL-iF+ / HyperTransport <sup>™</sup> technology AMD SR5690+SP5100	H8DGG-QF / HyperTransport™ technology Dual AMD SR5690+SP5100
System Memory (Max.)	1TB ECC Registered DDR3 1600/1333/1066 SDRAM in 32 DIMMs	512GB ECC Registered DDR3 1866/1600/1333/1066 SDRAM in 16 DIMMs	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs
Expansion Slots	1 PCI-E 2.0 x16 (low profile)	1 PCI-E 2.0 x16 or HTX slot (option)	2 PCI-E 2.0 x16 1 PCI-E 2.0 x8 (low profile) (For add-on card up to 5.9" length)
Onboard SAS/SCSI/ SATA/ IDE/RAID	AMD SP5100 for 3 SATA 2.0	AMD SP5100 for 3 SATA 2.0	AMD SP5100 for 3 SATA 2.0
Connectivity/VGA/ Audio	Dual LAN with Intel* 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	3 hot-swap 3.5" SATA drive bays	3 hot-swap 3.5" SATA drive bays	3 hot-swap 3.5" SATA drive bays
Peripheral Bays	1 slim DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)
Power Supply	1400W Gold Level high efficiency power supply	1400W Gold Level high efficiency power supply	1400W Gold Level high-efficiency power supply
Cooling System	6x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	6x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 705mm (17.2" x 1.7" x 27.75")	1U Rackmount 437 x 43 x 705mm (17.2" x 1.7" x 27.75")	1U Rackmount 437 x 43 x 716mm (17.2" x 1.7" x 28.2")

<sup>\*</sup> Please check 'Tested Memory List' on Supermicro website for compatibility

#### *G34 1U* 2.5" *HDD GPU*

#### G34 1U 16 DIMMs UIO

#### G34 1U 24 DIMMs UIO









MODEL	A+ Server 1122GG-TF	A+ Server 1022G-URF/ A+ Server 1022G-NTF	A+ Server 1122G-URF4+
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors
Key Applications	Specialized HPC cluster nodes, medical imaging, oil and gas simulation, quantum chemistry, financial simulation, astrophysics	High-end enterprise server, SQL server, High performance computer cluster (HPCC)	High-end enterprise server, SQL server, High performance computer cluster (HPCC)
Outstanding Features	Supports up to 2 GPU cards  512GB DDR3 1600/1333/1066 SDRAM  6 hot-swap 2.5" SATA drive bays  RAID: 0, 1, 10  2 Gigabit Ethernet ports  IPMI 2.0 management  1400W Gold Level high-efficiency power supply	4 hot-swap 3.5" SATA drive bays (1022G-NTF)     4 hot-swap 3.5" SATA/SAS drive bays (1022G-URF addition UIO SAS card required)     RAID: 0, 1, 10 (1022G-NTF)     Universal I/O slot (1022G-URF) and PCI-E slot 512GB DDR3 1600/1333/1066 SDRAM     2 Gigabit Ethernet ports     IPMI 2.0 management     700W Gold Level high-efficiency redundant power supplies (1022G-URF only)     560W high-efficiency power supply (1022G-NTF)	8 hot-swap 2.5" SATA/SAS drive bays (additional UIO SAS card required) Resource optimized system solution 4 Gigabit Ethernet ports 768GB DDR3 1600/1300/1066 SDRAM in 24 DIMMs Full-Height, Full-Length expansion cards IPMI 2.0 management 700W Gold Level high-efficiency redundant power supplies
Serverboard/Chipset	H8DGG-QF/HyperTransport™ technology Dual AMD SR5690+SP5100	H8DGU-F / HyperTransport™ technology AMD SR5670+SP5100	H8DGU-LN4F+ / HyperTransport™ technology AMD SR5690+SP5100
System Memory (Max.)	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	768GB ECC Registered DDR3 1600/1333/1066 SDRAM in 24 DIMMs
Expansion Slots	2 PCI-E 2.0 x16 1 PCI-E 2.0 x8 (low profile) (For add-on card up to 5.9" length)	1 Universal I/O (UIO) slot and 1 PCI-E 2.0 x16 (1022G-URF only) 2 PCI-E 2.0 x8 (1022G-NTF only)	1 Universal I/O (UIO) slot 1 PCI-E 2.0 x 16
Onboard SAS/SCSI/ SATA/ IDE/RAID	AMD SP5100 for 3 SATA 2.0	1 Universal I/O (UIO) slot and 1 PCI-E 2.0 x16 (1022G-URF only)* 2 PCI-E 2.0 x8 (1022G-NTF only)	UIO SAS 8 port controller (optional) AMD SP5100 for 6 SATA 2.0 *
Connectivity/VGA/ Audio	Dual LAN with Intel* 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Four LAN with dual Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	6 hot-swap 2.5" SATA drive bays	4 hot-swap 3.5" SAS or SATA drive bays	8 hot-swap 2.5" SAS/SATA drive bays
Peripheral Bays	N/A	1 slim DVD-ROM drive	1 slim DVD-ROM drive (optional)
Power Supply	1400W Gold Level high-efficiency power supply	700W Gold Level high-efficiency redundant power supplies (1022G-URF only) 560W Gold Level high-efficiency power supply (1022G-NTF only)	700W Gold Level high-efficiency redundant power supplies
Cooling System	8x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	4x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	5x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 716mm (17.2" x 1.7" x 28.2")	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")	1U Rackmount 437 x 43 x 676mm (17.2" x 1.7" x 26.6")

<sup>\*</sup> Supermicro UIO card must be installed









MODEL	A+ Server 1012A-M73RF	A+ Server 1012A-MTF	A+ Server 1012A-MRF
Processor Support	8/4-Core AMD Opteron™ 3000 series processors	8/4-Core AMD Opteron™ 3000 series processors	8/4-Core AMD Opteron™ 3000 series processors
Key Applications	File/print server, firewall applications, mail server, web server for small business, server appliance, cluster node	File/print server, firewall applications, mail server, web server for small business, server appliance, cluster node	File/print server, firewall applications, mail server, web server for small business, server appliance, cluster node
Outstanding Features	<ul> <li>4 hot-swap 3.5" SATA /SAS drive bays</li> <li>RAID: 0, 1, 10</li> <li>1 PCI-E 2.0 x4 (in x8 slot)</li> <li>32GB of DDR3 Unb. ECC memory</li> <li>2 Intel 82574L single-port Gigabit Ethernet, 10/100/1000Base-T support</li> <li>400W high-efficiency redundant power supply</li> </ul>	<ul> <li>4 hot-swap 3.5" SATA drive bays</li> <li>RAID 0,1,10</li> <li>1 PCI-E 2.0 x4 (in x8 slot)</li> <li>32GB of DDR3 Unb. ECC memory</li> <li>2 Intel 82574L single-port Gigabit Ethernet, 10/100/1000Base-T support</li> <li>350W high-efficiency power supply</li> </ul>	2 SATA internal drive bays RAID: 0, 1 1 PCI-E 2.0 x4 (in x8 slot) 32GB of DDR3 Unb. ECC memory 2 Intel 82574L single-port Gigabit Ethernet, 10/100/1000Base-T support 200W high-efficiency power supply 1U Rackmount (14" depth optimized space efficiency)
Serverboard/Chipset	H8SML-7F HyperTransport <sup>™</sup> technology AMD SR5650+SP5100 + LSI 2308	H8SML-iF HyperTransport <sup>™</sup> technology AMD SR5650+SP5100	H8SML-iF HyperTransport <sup>™</sup> technology AMD SR5650+SP5100
System Memory (Max.)	32GB unbuffered DDR3 ECC 1600/1333/1066 in 4 DIMMs	32GB unbuffered DDR3 ECC 1600/1333/1066 in 4 DIMMs	32GB unbuffered DDR3 ECC 1600/1333/1066 in 4 DIMMs
Expansion Slots	PCI-E 2.0 x4 (in x8 slot)	PCI-E 2.0 x4 (in x8 slot)	PCI-E 2.0 x4 (in x8 slot)
Onboard SAS/SCSI/ SATA/ IDE/RAID	LSI* 2308 SAS Controller for 4 SAS	AMD SR5650 / SP5100 for 4 SATA 2.0	AMD SR5650 / SP5100 for 2 SATA 2.0
Connectivity/VGA/ Audio	Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	4 hot-swap 3.5" SATA /SAS drive bays	4 hot-swap 3.5" SATA drive bays	2 internal 3.5" drive SATA bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	400W redundant SuperCompact Short-depth AC-DC high-efficiency power supply	350W Gold Level efficiency power supply	200W efficiency power supply
Cooling System	4x 4cm heavy duty counter-rotating fans	4x 4cm heavy duty counter-rotating fans	1 x 10 cm heavy duty counter-rotating fans
Form Factor	1 U Rackmount 437 x 43 x 503 mm (17.2" x 1.7"x 19.8")	1U Rackmount 437 x 43 x 503 mm (17.2" x 1.7"x 19.8")	1U Rackmount (14" Depth) 426 x 43 x 345mm (16.8" x 1.7" x 14")

 $<sup>* \</sup>textit{Please check 'Tested Memory List' on Supermicro website for compatibility}$ 



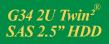


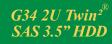




MODEL	A+ Server 1012G-MTF	A+ Server 1012C-MRF	A+ Server 1022TC-TF/ A+ Server 1022TC-IBQF
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors
Key Applications	File/print server, firewall applications, mail server, web server for small business, server appliance, cluster node	File/print server, firewall applications, mail server, web server for small business, server appliance, cluster node	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications
Outstanding Features	Short depth chassis  4 hot-swap 3.5" SATA drive bays  RAID: 0, 1, 10  256GB DDR3 1600/1333/1066 SDRAM  350W Gold Level high-efficiency power supply  IPMI 2.0 management  Cost-effective	128GB DDR3 1600/1333/1066 /800 SDRAM     2 internal 3.5" SATA drive bays     RAID: 0, 1     PCI-E 2.0 x16 support     2 Gigabit Ethernet ports     Cost-effective     350W Gold Level high-efficiency power-supply	Two nodes in 1U Double density and computing power Independent power control Independent cooling control The power swap 3.5" SATA drive bays (Per Node) RAID: 0,1 Higher power utilization increases power-supply efficiency 920W Platinum Level (94%+) high-efficiency power supply Reduce power cables and power strips
Serverboard/Chipset	H8SGL-F / HyperTransport™ technology AMD SR5650+SP5100	H8SCM-F / HyperTransport™ technology AMD SR5650+SP5100	H8DCT-F/-IBQF / HyperTransport <sup>™</sup> technology AMD SR5670+SP5100
System Memory (Max.)	256GB ECC Registered DDR3 1600/1333/1066 SDRAM in 8 DIMMs	128GB ECC Registered DDR3 1600/1333/1066/800 SDRAM in 4 DIMMs	Twin set of 192 GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs
Expansion Slots	1 PCI-E 2.0 x8	1 PCI-E 2.0 x8	Twin set of PCI-E 2.0 x16 via Riser card (low profile)
Onboard SAS/SCSI/ SATA/ IDE/RAID	AMD SP5100 for 4 SATA 2.0	AMD SP5100 for 2 SATA 2.0	Twin set of AMD SP5100 for 2 SATA 2.0
Connectivity/VGA/ Audio	Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82574L Gigabit Ethernet controller Matrox G200eW graphics controller	Twin set of dual LAN with Intel® 82576 Gigabit Ethernet controller Twin set of Mellanox Connect-X 40Gpbs InfiniBand (1022TC-IBQF only) Twin set of Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	4 hot-swap 3.5" SATA drive bays	2 internal 3.5" drive bays	Twin set of 2 hot-swap 3.5" SATA drive bays
Peripheral Bays	1 slim DVD-ROM drive	1 slim DVD-ROM drive (optional)	N/A
Power Supply	350W Gold Level high-efficiency power supply	350W Gold Level high-efficiency power supply	920W Platinum Level (94%+) high-efficiency power supply
Cooling System	4x 4cm heavy duty fans with air shroud & optimal fan speed control	2x 4cm heavy duty counter-rotating fan with air shroud & optimal fan speed control	Twin set of 3x 4cm heavy duty counter- rotating fans with air shroud & optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	Mini 1U Rackmount 437 x 43 x 369mm (17.2" x 1.7" x 14.5")	1U Rackmount 437 x 43 x 704mm (17.2" x 1.7" x 27.75")

# G34 2U Twin<sup>2®</sup> SAS 3.5" HDD







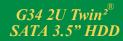






MODEL	A+ Server 2022TG-H6RF A+ Server 2022TG-H6IBQRF	A+ Server 2122TG-H6IBQRF/ A+ Server 2122TG-H6RF	A+ Server 2022TG-HLIBQRF A+ Server 2022TG-HLTRF
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors
Key Applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications
Outstanding Features	LSI 2108 SAS2 RAID controller Best performance per watt Four hot-swappable nodes in 2U Up to 128 Cores in 2U Quad set of 3 hot-swap 3.5" SATA/SAS drive bays RAID: 0, 1, 5 More than double computing density and efficiency Independent power control Independent cooling control 1620W Platinum Level (94%+) high-efficiency redundant power Reduce power cables and power strips Save maintenance/ management costs	LSI* 2108 SAS2 RAID controller Best performance per watt Four hot-swappable nodes in 2U Up to 128 Cores in 2U Quad set of 6 hot-swap 2.5" SATA/SAS drive bays RAID: 0, 1, 5, 6, 10, 50 More than double computing density and efficiency Independent power control Independent cooling control 1620W Platinum Level (94%+) highefficiency redundant power Reduce power cables and power strips Save maintenance/ management costs	Best performance per watt Four hot-swappable nodes in 2U Up to 128 Cores in 2U Quad set of 3 hot-swap 3.5" SATA drive bays RAID: 0, 1 More than double computing density and efficiency Independent power control Independent cooling control Independent cooling control I620W Platinum Level (94%+) high-efficiency redundant power Reduce power cables and power strips Save maintenance/ management costs
Serverboard/Chipset	H8DGT-HLIBQF/HLF / HyperTransport™ technology AMD SR5690+SP5100	H8DGT-HLIBQF/HLF / HyperTransport™ technology AMD SR5690+SP5100	H8DGT-HLIBQF/HLF / HyperTransport™ technology AMD SR5690+SP5100
System Memory (Max.)	Quad set of 256GB ECC Registered DDR3 1866/1600/1333/1066 SDRAM in 8 DIMMs	Quad set of 256GB ECC Registered DDR3 1866/1600/1333/1066 SDRAM in 8 DIMMs	Quad set of 256GB ECC Registered DDR3 1866/1600/1333/1066 SDRAM in 8 DIMMs
Expansion Slots	Quad set of PCI-E 2.0 x16 (low profile)	Quad set of PCI-E 2.0 x16 (low profile)	Quad set of PCI-E 2.0 x16 (low profile)
Onboard SAS/SCSI/ SATA/ IDE/RAID	Quad set of LSI 2108 for 3 SAS	Quad set of LSI 2108 for 6 SAS	Quad set of AMD SP5100 for 3 SATA 2.0
Connectivity/VGA/ Audio	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (H6IBQRF only) Quad set of Matrox G200eW graphics controller	Quad set of dual LAN w/ Intel* 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (H6IBQRF only) Quad set of Matrox G200eW graphics controller	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (HLIBQRF only) Quad set of Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	Quad set of 3 hot-swap 3.5" SAS/SATA drive bays	Quad set of 6 hot-swap 2.5" SAS/SATA drive bays	Quad set of 3 hot-swap 3.5" SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1620W Platinum Level (94%+) high-efficiency redundant power supplies with PMBus	1620W Platinum Level (94%+) high-efficiency redundant power supplies with PMBus	1620W Platinum Level (94%+) high-efficiency redundant power supplies with PMBus
Cooling System	Twin set of 2x 8cm heavy duty counter- rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter- rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter- rotating fans with air shroud & optimal fan speed control
Form Factor	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")

# G34 2U Twin<sup>2®</sup> SATA 2.5" HDD













MODEL	A+ Server 2122TG-HTRF A+ Server 2122TG-HIBQRF	A+ Server 2022TG-HTRF A+ Server 2022TG-HIBQRF	A+ Server 2122TC-H6RF4
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors
Key Applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications
Outstanding Features	Best performance per watt Four hot-swappable nodes in 2U Up to 128 Cores in 2U Quad set of 6 hot-swap 2.5" SATA drive bays RAID: 0, 1,10 More than double computing density and efficiency Independent power control Independent cooling control 1400W Gold Level high-efficiency redundant power Save maintenance/ management costs	Best performance per watt Four hot-swappable nodes in 2U Up to 128 Cores in 2U Quad set of 3 hot-swap 3.5" SATA drive bays RAID: 0, 1 More than double computing density and efficiency Independent power control Independent cooling control 1400W Gold Level high-efficiency redundant power Reduce power cables and power strips Save maintenance/ management costs	LSI* 2108 SAS2 RAID controller Best performance per watt 4 hot-swappable nodes in 2U Quad set of 6 hot-swap 2.5" SATA/SAS drive bays RAID: 0, 1, 5, 6, 10, 50 More than double computing density and efficiency Independent power control Independent cooling control Independent cooling control 1620W Platinum Level (94%+) high-efficiency redundant power Reduce power cables and power strips Save maintenance/ management costs
Serverboard/Chipset	H8DGT-HF/HIBQF / HyperTransport™ technology AMD SR5670+SP5100	H8DGT-HF/HIBQF / HyperTransport™ technology AMD SR5670+SP5100	H8DCT-HLN4F / HyperTransport <sup>™</sup> technology AMD SR5670+SP5100
System Memory (Max.)	Quad set of 512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	Quad set of 512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	Quad set of 192GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs
Expansion Slots	Quad set of PCI-E 2.0 x 16 (low profile) (For add-on card up to 5.9"in length)	Quad set of PCI-E 2.0 x16 (low profile) (For add-on card up to 5.9"in length)	Quad set of PCI-E 2.0 x16 (low profile)
Onboard SAS/SCSI/ SATA/ IDE/RAID	Quad set of AMD SP5100 for 6 SATA 2.0	Quad set of AMD SP5100 for 3 SATA 2.0	Quad set of LSI 2108 SAS 2 Controller
Connectivity/VGA/ Audio	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (HIBQRF only) Quad set of Matrox G200eW graphics controller	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (HIBQRF only) Quad set of Matrox G200eW graphics controller	Quad set of four LAN w/ Intel® i350 GbE controller Quad set of Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	Quad set of 6 hot-swap 2.5" SATA drive bays	Quad set of 3 hot-swap 3.5" SATA drive bays	Quad set of 6 hot-swap 2.5" SAS/SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1400W Gold Level high-efficiency redundant power supplies with PMBus	1400W Gold Level high-efficiency redundant power supplies with PMBus	1620W Platinum Level (94%+) high-efficiency redundant power supplies with PMBus
Cooling System	Twin set of 2x 8cm heavy duty counter- rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter- rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter- rotating fans with air shroud & optimal fan speed control
Form Factor	2U Rackmount 438 x 89 x 724mm(17.25' x 3.5' x 28.5')	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

 $<sup>*\</sup> Please\ check\ 'Tested\ Memory\ List' on\ Supermicro\ website\ for\ compatibility$ 

# C32 2U Twin<sup>2®</sup> 2U Twin<sup>2®</sup> 2U Twin<sup>2®</sup> 12 HDD per Node

MODEL	A+ Server 2022TC-HTRF4	A+ Server 2022TC-BTRF/ A+ Server 2022TC-BIBQRF	A+ Server 2122TC-DL6RF4
Processor Support	8/6/4-Core AMD Opteron™ 4000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors	8/6/4-Core AMD Opteron™ 4000 Series Processors
Key Applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, storage nodes, datacenter, data farm, front-end server and other computing intensive applications
Outstanding Features	Best performance per watt  4 hot-swappable nodes in 2U  Quad set of 3 hot-swap 3.5" SAT drive bays  R AID: 0, 1  More than double computing density and efficiency  Independent power control  Independent cooling control  1620W Platinum Level (94%+) high-efficiency redundant power  Reduce power cables and power strips  Save maintenance/ management costs	Best performance per watt  4 hot-swappable nodes in 2U  Quad set of 3 hot-swap 3.5" SATA drive bays  RAID: 0, 1  More than double computing density and efficiency  Independent power control  Independent cooling control  1400W Gold Level high-efficiency redundant power  Reduce power cables and power strips  Save maintenance/ management costs	LSI* 2008 SAS2 RAID controller Best performance per watt 2 hot-swappable nodes in 2U 12 hot-swap 2.5" SAS/ SATA drive bays per node RAID: IT Mode only More than double computing density and efficiency Independent power control Independent cooling control 1280W Platinum Level (94%+) high-efficiency redundant power Reduce power cables and power strips Save maintenance/ management costs
Serverboard/Chipset	H8DCT-HLN4F / HyperTransport™ technology AMD SR5670+SP5100	H8DCT-F/-IBQF / HyperTransport™ technology AMD SR5670+SP5100	H8DCT-HLN4F HyperTransport <sup>™</sup> technology AMD SR5670+SP5100
System Memory (Max.)	Quad set of 192GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs	Quad set of 192GB ECC Registered or 64GB unbuffered ECC/non-ECC DDR3 1600/1333/1066 SDRAM in 12 DIMMs	Dual set of 192GB ECC Registered DDR3 1600/1333/1066 SDRAM in 12 DIMMs
Expansion Slots	Quad set of PCI-E 2.0 x16 (low profile)	Quad set of PCI-E 2.0 x16 (low profile)	Dual set of PCI-E 2.0 x16 (low profile)
Onboard SAS/SCSI/ SATA/ IDE/RAID	Quad set of AMD SP5100 for 3 SATA 2.0	Quad set of AMD SP5100 for 3 SATA 2.0	Dual set of LSI 2008 for SAS2 with expander
Connectivity/VGA/ Audio	Quad set of four LAN w/ Intel® i350 GbE controller Quad set of Matrox G200eW graphics controller	Quad set of dual LAN w/ Intel® 82576 GbE controller Quad set of Mellanox Connect-X2 40Gbps InfiniBand (BIBQRF only) Quad set of Matrox G200eW graphics controller	Dual set of Quad LAN w/ Intel* I350 GbE controller Dual set of Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	Quad set of 3 hot-swap 3.5" SATA drive bays	Quad set of 3 hot-swap 3.5" SATA drive bays	Dual set of 12 hot-swap 2.5" SAS/SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1620W Platinum Level (94%+) high-efficiency redundant power supplies with PMBus	1400W Gold Level high-efficiency redundant power supplies with PMBus	1280W Platinum Level (94%+) high-efficiency redundant power supplies with PMBus
Cooling System	Twin set of 2x 8cm heavy duty counter- rotating fans with air shroud & optimal fan speed control	Twin set of 2x 8cm heavy duty counter- rotating fans with air shroud & optimal fan speed control	Dual set of 2x 8cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 89 x 724mm (17.25" x 3.5" x 28.5")

# 4-Way SAS On Board



#### 4-Way SAS On Board









MODEL	A+ Server 2042G-6RF	A+ Server 2042G-TRF	A+ Server 2042G-72RF4
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors
Key Applications	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing, High performance computer cluster (HPCC)
Outstanding Features	Enterprise level 4-way system LSI* 2008 SAS2 RAID controller 6 hot-swap 3.5" SATA/SAS drive bays RAID: 0, 1, 10 (5 optional) ITB DDR3 1600/1333/1066 SDRAM 2 Gigabit Ethernet ports IPMI 2.0 management with dedicated LAN Redundant 1400W Gold Level high-efficiency power supply	Enterprise level 4-way system hot-swap 3.5" SATA drive bays RAID: 0, 1, 10 ITB DDR3 1600/1333/1066 SDRAM Gigabit Ethernet ports IPMI 2.0 management with dedicated LAN Redundant 1400W Gold Level high-efficiency power supply	Enterprise level 4-way system LSI 2208 SAS2 HW RAID controller 6 hot-swap 3.5" SATA/SAS drive bays RAID: 0, 1, 5, 6, 10, 50 ITB DDR3 1600/1333/1066 SDRAM 4 Intel 1350 Gigabit Ethernet ports IPMI 2.0 management with dedicated LAN Redundant 1400W I Platinum Level (94%+) Digital high-efficiency redundant power supplies
Serverboard/Chipset	H8QG6-F / HyperTransport™ technology AMD SR5690+SR5670+SP5100	H8QGi-F / HyperTransport™ technology AMD SR5690+SR5670+SP5100	H8QG7-LN4F HyperTransport <sup>™</sup> technology AMD SR5690+SR5670 *SP5100 + LSI2208
System Memory (Max.)	1TB ECC Registered DDR3 1600/1333/1066 SDRAM in 32 DIMMs	1TB ECC Registered DDR3 1600/1333/1066 SDRAM in 32 DIMMs	1TB ECC Registered DDR3 1600/1333/1066 in 32 DIMMs
Expansion Slots	2 PCI-E 2.0 x16 (low profile) 1 PCI-E 2.0 x8 (low profile) 1 Universal I/O or PCI-E 2.0 x8 (low profile)	2 PCI-E 2.0 x16 (low profile) 1 PCI-E 2.0 x8 (low profile) 1 Universal I/O or PCI-E 2.0 x8 (low profile)	2 PCI-E 2.0 x16 (low profile) 2 PCI-E 2.0 x8 (low profile)
Onboard SAS/SCSI/ SATA/ IDE/RAID	LSI* 2008 SAS2 Controller for 6 SAS2	AMD SP5100 for 6 SATA 2.0	LSI* 2208 SAS2 Controller for 6 SAS 2 / SATA 2.0 HW RAID 0, 1, 5, 6, 10, 50 support
Connectivity/VGA/ Audio	Dual LAN with Intel* 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Quad Intel I350 Gigabit Ethernet Controller Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	6 hot-swap 3.5" SAS or SATA drive bays + 1 Hidden 2.5" drive bay	6 hot-swap 3.5" SATA drive bays + 1 Hidden 2.5" drive bay	6 hot-swap 3.5" SAS or SATA drive bays +1 Hidden 2.5" drive bay
Peripheral Bays	1 slim DVD-ROM drive	1 slim DVD-ROM drive	1 slim DVD-ROM drive (optional)
Power Supply	1400W Gold Level high-efficiency redundant power supplies	1400W Gold Level high-efficiency redundant power supplies	1400W Platinum Level (94%+) Digital high- efficiency redundant power supplies
Cooling System	6x 8cm heavy duty fans with air shroud & optimal fan speed control	6x 8cm heavy duty fans with air shroud & optimal fan speed control	6x 8cm heavy duty fans with air shroud & optimal fan speed control
Form Factor	2U Rackmount 437 x 709 x 89mm (17.2" x 27.9" x 3.5")	2U Rackmount 437 x 89 x 709mm (17.2" x 3.5" x 27.9")	2U Rackmount 437 x 709 x 89mm (17.2" x 27.9" x 3.5")

#### Resource Optimized



AMD

OPTERON

#### **UIO** Server





MODEL	A+ Server 2022G-URF4+	A+ Server 2022G-URF	A+ Server 2021A-32R+F/ A+ Server 2021A-T2R+F
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors
Key Applications	High-end enterprise server, SQL server, high performance computer cluster (HPCC)	High-end enterprise server, SQL server, high performance computer cluster (HPCC)	Business critical applications, virtualization, front-end server, database applications, primary server for mid-size companies, internet, e-business, server clustering
Outstanding Features	8 hot-swap 3.5"SATA/SAS drive bays (addition UIO SAS card required) Resource optimized system solution 4 Gigabit Ethernet ports 768GB DDR3 1600/1333/1066 SDRAM in 24 DIMMs Full-Height Full-Length expansion cards IPMI 2.0 management 920W Platinum-Level (94%+) high-efficiency redundant power supplies	8 hot-swap 3.5" SATA/SAS drive bays (addition UIO SAS card required) Universal I/O slot and PCI-E 512GB DDR3 1600/1333/1066 SDRAM 2 Gigabit Ethernet ports IPMI 2.0 management 720W Gold Level high-efficiency redundant power supplies	Up to 8 drive bays Low-profile PCI-E 2.0 slots 128GB DDR2 800/667/533 SDRAM 2 Gigabit Ethernet ports SAS RAID support (2021A-32R+ only) IPMI 2.0, KVM with Virtual Media 720W Gold Level high-efficiency redundant power supplies
Serverboard/Chipset	H8DGU-LN4F+ / HyperTransport™ technology AMD SR5690+SP5100	H8DGU-F / HyperTransport™ technology AMD SR5670+SP5100	H8DI3+-F/H8DIi+-F / HyperTransport™ technology AMD SR5690+SP5100
System Memory (Max.)	768GB ECC Registered DDR3 1600/1333/1066 SDRAM in 24 DIMMs	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMMs*
Expansion Slots	3 PCI-E 2.0 x8 1 Universal I/O (UIO) slot	1 Universal I/O (UIO) slot 3 PCI-E 2.0 x8 (full size)	2 PCI-E 2.0 x8 (using x16 slot) 1 PCI-E 2.0 x4 (using x8 slot) 2 64-bit PCI-X 133/100 MHz (All Low-profile slots)
Onboard SAS/SCSI/ SATA/ IDE/RAID	UIO SAS 8 port controller (Optional) AMD SP5100 for 6 SATA 2.0 **	UIO SAS 8 port controller (Optional) AMD SP5100 for 6 SATA 2.0 **	LSI* 1068E SAS Controller (2021A-32R+ only) AMD SP5100 for 6 SATA .02
Connectivity/VGA/ Audio	Four LAN with two Intel® 82576 Gigabit Ethernet controllers Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with two Intel® 82574L Gigabit Ethernet Matrox G200eW graphics controller
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog
Drive Bays	8 hot-swap 3.5" SAS/SATA drive bays + 2 Hidden 2.5" drive bay	8 hot-swap 3.5" SAS/SATA drive bays + 2 Hidden 2.5" drive bay	8 hot-swap 3.5" SAS/SATA drive bays
Peripheral Bays	1 slim DVD-ROM drive	1 slim DVD-ROM drive	1 slim DVD-ROM drive (optional)
Power Supply	920W Platinum Level (94%+) high-efficiency redundant power supplies	720W Gold Level high-efficiency redundant power supplies	720W Gold Level high-efficiency redundant power supplies
Cooling System	4x 8cm heavy duty fans with air shroud & optimal fan speed control	3x 8cm heavy duty fans with air shroud & optimal fan speed control	3x 8cm heavy duty fans with air shroud & optimal fan speed control
Form Factor	2U Rackmount 437 x 89 x 704mm (17.2" x 3.5" x 27.75")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.5")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.5")

<sup>\*</sup> Fully populated DDR2 800/667 memory will be downgraded to DDR2 533.

\*\* Supermicro UIO card must be installed

#### MicroCloud 12x UP Hot-Pluggable Nodes 1620W Platinum Level Power

## 4-Way SAS On Board

#### 4-Way









MODEL	A+ Server 3012MA-H12TRF	A+ Server 4042G-72RF4	A+ Server 4042G-6RF A+ Server 4042G-TRF	
Processor Support	8/4 Core AMD Opteron™ 3000 series processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	
Key Applications	Cloud Computing, Web server, Datacenter applications	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing, High performance computer cluster (HPCC)	Mission-critical applications, enterprise server, large database, e-business, Internet, online transaction processing	
Outstanding Features	12 UP hot-pluggable nodes in 3U     2x 3.5" or 4x 2.5" (optional) SATA drive bays per node     RAID 0, 1, 10 (optional with 4x 2.5" drive bays installed)     Up to 32GB DDR3 UDIMMs per node     Micro LP PCI-E 2.0 x8     IPMI 2.0 + KVM w/dedicated LAN 1620W redundant Platinum Level (94%+) high-efficiency power supplies     Independent power control	Enterprise level 4-way system LSI 2208 SAS2 HW RAID controller 5 hot-swap 3.5" SATA/SAS drive bays RAID: 0, 1, 5, 6, 10, (50, 60 optional part required) ITB DDR3 1600/1333/1066 SDRAM 4 Intel 1350 Gigabit Ethernet ports IPMI 2.0 management with dedicated LAN Redundant 1400W Platinum Level (94%+) Digital high-efficiency redundant power supplies	Enterprise level 4-way system LSI 2008 SAS2 RAID controller (4042G-6RF only) 5 hot-swap 3.5" SATA/SAS drive bays (SAS for 4042G-6RF only) RAID: 0, 1, 10; (5 optional for 4042G-6RF on ly) RAID: 0, 1, 10 (4042G-TRF only) ITB DDR3 1600/1333/1066 SDRAM 2 Gigabit Ethernet ports IPMI 2.0 management with dedicated LAN Redundant 1400W Gold Level high-efficiency redundant power supplies	
Serverboard/Chipset	H8SME-F AMD SR5650+SP5100	H8QG7-LN4F HyperTransport™ technology AMD SR5690+SR5670 *SP5100 + LSI2208	H8QG6-F/H8QGi-F HyperTransport™ technology AMD SR5690+SR5670 & SP5100 *SP5100 + LSI2208 (6RF series)	
System Memory (Max.)	Twelve sets of 4 DIMM Sockets ( Per Node) up to 32GB DDR3 ECC VLP-UDIMM 1600/1333/1066	1TB ECC Registered DDR3 1600/1333/1066 in 32 DIMMs	1TB ECC Registered DDR3 1600/1333/1066 in 32 DIMMs	
Expansion Slots	Twelve sets of Micro LP PCI-E 2.0 x8 slot	2 PCI-E 2.0 x16 2 PCI-E 2.0 x8	2 PCI-E 2.0 x16 1 PCI-E 2.0 x8 1 Universal I/O or PCI-E 2.0 x8	
Onboard SAS/SCSI/ SATA/ IDE/RAID	AMD SP5100 for 4 SATA 2.0	LSI® 2208 SAS Controller for 5 SAS2 / SATA 2.0 ; HW RAID 0, 1, 5, 6, 10, 50, 60 support	LSI* 2008 SAS2 Controller (4042G-6RF only) AMD SP5100 for 6 SATA (4042G-TRF only)	
Connectivity/VGA/ Audio	Dedicated management LAN port; 2 Gigabit LAN Port (W/ Micro LP card) Matrox G200eW graphics controller	Quad Intel 1350 Gigabit Ethernet Controller Matrox G200eW graphics controller	Dual LAN with Intel® 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	
Management	Twelve sets of IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	
Drive Bays	Twelve sets of 2x 3.5" or 4x 2.5" (optional) SATA drive bays (internal)	Default 1 mobile rack (5x 3.5" drives) hot-swap drive bays Supports up to 2 mobile racks (10 drives) hot- swap drive bays	Default 1 mobile rack (5 drives) hot-swap drive bays Supports up to 2 mobile racks (10 drives)hot- swap drive bays	
Peripheral Bays	N/A	3x 5.25" drive bays	3x 5.25" drive bays	
Power Supply	1620W redundant Platinum Level (94%+) high-efficiency power supplies	1400W Platinum Level (94%+) Digital high- efficiency redundant power supplies	1400W Gold Level high-efficiency redundant power supplies	
Cooling System	4x 9cm heavy duty fans with optimal fan speed control	3x 8cm hot-swap cooling fans & 3x 8cm exhaust fans optimal fan speed control	3x 8cm hot-swap cooling fans & 3x 8cm exhaust fans speed control	
Form Factor	3U Rackmount 749.3 x 132.5 x 444.5mm (29.5" x 5.21" x 17.5")	4U Rackmount (optional) / Tower 452 x 746 x 178mm (17.8" x 29.4" x 7")	4U Rackmount (optional) / Tower 452 x 746 x 178mm (17.8" x 29.4" x 7")	

<sup>\*</sup> Please check 'Tested Memory List' on Supermicro website for compatibility

#### G34 DP 4U/Tower Server





# GPU Optimized





MODEL	A+ Server 4022G-6F	A+ Server 4021GA-62R+F	A+ Workstation 4021A-T2 A+ Workstation 4021A-T2B		
Processor Support	16/12/8/4-Core AMD Opteron™ 6000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors	6-Core AMD Opteron™ 2000 Series Processors		
Key Applications	High-end enterprise server, SQL server, high performance computer cluster (HPCC)	Ultra-high performance workstation, medical imaging, oil and gas simulation, quantum chemistry, financial simulation, astrophysics	High-end workstation, business critical applications, front-end server, database applications, video server		
Outstanding Features	Mainstream system in 4U/Tower form factor  100% cooling redundancy  8 hot-swap SAS or SATA Drive Bays  RAID: 0, 1, 10  512GB DDR3 1600/1333/1066 SDRAM in 16 DIMMs  6 PCI-E 2.0 expansion slots  IPMI 2.0 management  920W Platinum Level (94%+) high-efficiency power supply with PMBus	GPU optimized 4U/tower solution Up to 4 TeraFLOPS of performance per system Up to 4 GPUs installed per system Supports up ot 7 expansion cards Support PCI-E 2.0 IPMI 2.0 + KVM w/ dedicated LAN 1400W Gold Level high-efficiency redundant power supplies with PMBus 4 sets of 6-pin 12V for GPU or graphics cards	SuperQuiet mode Up to 8 SATA drive bays 2 PCI-E x16 64GB DDR2 800/667/533 SDRAM 2 Gigabit Ethernet ports SIMLP(+) (IPMI 2.0) management Low-noise 645W with fan speed control		
Serverboard/Chipset	H8DG6-F / HyperTransport™ technology Dual AMD SR5690+SP5100	H8DA6+-F / HyperTransport™ technology Dual AMD SR5690+SP5100	H8DAE-2 / HyperTransport™ technology NVIDIA MCP55-Pro + IO55 NEC 720400 PCI-X Bridge		
System Memory (Max.)	512GB ECC Registered DDR3 1600/1333/1066 SDRAM in 16 DIMMs	128GB ECC Registered DDR2 800/667/533 SDRAM in 16 DIMM sockets	64GB ECC Registered DDR2 800/667/533 SDRAM in 8 DIMMs		
Expansion Slots	3 PCI-E 2.0 x16 1 PCI-E 2.0 x8 2 PCI-E 2.0 x4 (using x8 slots)	4 PCI-E 2.0 x16 2 PCI-E 2.0 x4 (using x8 slots) 1 32-bit PCI	2 PCI-E x16 1 PCI-E x8 1 PCI-E x4 (using x8 slot) 1 64-bit PCI-X 133 MHz 1 64-bit PCI-X 100 MHz SIMLP IPMI slot		
Onboard SAS/SCSI/ SATA/ IDE/RAID	LSI* 2008 SAS2 Controller	LSI* 2008 SAS2 Controller AMD SP5100 for 6 SATA2	NVIDIA MCP55-Pro for 6 SATA		
Connectivity/VGA/ Audio	Dual LAN with Intel* 82576 Gigabit Ethernet controllers Matrox G200eW graphics controller	Dual LAN with Intel* 82576 Gigabit Ethernet controller Matrox G200eW graphics controller	Dual LAN with NVIDIA MCP55-Pro Gigabit Ethernet controller ALC883 audio CODEC high definition 7.1 channel sound		
Management	IPMI 2.0, SuperDoctor III, Watch Dog	IPMI 2.0, SuperDoctor III, Watch Dog	SIMLP(+) (IPMI 2.0), SuperDoctor III, Watch Dog		
Drive Bays	8 hot-swap 3.5" SAS or SATA drive bays	8 hot-swap 3.5" SAS2/SATA drive bays	6 hot-swap 3.5" SATA drive bays and 2 spare SATA drive bays 2x 5.25" drive bays		
Peripheral Bays	2x 5.25" drive bays optional floppy drive	3x 5.25" drive bays optional floppy drive	2x 5.25" drive bays optional floppy drive		
Power Supply	920W Platinum Level (94%+) high-efficiency power supply with PMBus	1400W Gold Level high-efficiency redundant power supplies with PMBus 4 sets of 6-pin 12V for GPU or graphics cards	645W with low-noise fan speed control		
Cooling System	3x 8cm hot-swap cooling fans & 2x 8cm exhaust fans with air shroud & optimal fan speed control	4x 9.2cm hot-swap cooling fans with air shroud 2x 8cm exhaust fans optimal fan speed control	4x 8cm 4-pin Pulse Width Modulated (PWM) fans with air shroud 1x 8cm exhaust fan		
Form Factor	4U Rackmount (optional) /Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")	4U Rackmount (optional) /Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")	4U Rackmount (optional) /Tower 437 x 178 x 648mm (17.2" x 7" x 25.5")		

<sup>\*\*</sup> Fully populated DDR2 800/667 will be downgraded to DDR2 533
\*\* Please check 'Tested Memory List' on Supermicro website for compatibility

# SuperBlade® Server Solutions

#### Best Density

- Up to 40 processors (640 cores) per 7U enclosure
- Up to 40 2.5" SATA HDD/SSDs per 7U enclosure

#### Fastest and Most Cost-Effective Networking Solution

- · FDR/QDR InfiniBand switch
- 10GbE switch layer 2/3 switch
- 1/10GbE switch layer 2/3 switch
- 1GbE switch layer 2 switch
- 1GbE and 10GbE pass-through modules
- Data Center Converged Switch with FCoE

#### High Efficiency Power for Earth-Friendly Operations

- 94%+ Platinum Level high efficiency 3000W and 2500W power
- supplies with N+1 redundancy Multiple Choices 1620W, 2500W or 3000W

#### Outstanding Storage Flexibility

- Up to four hot-plug 2.5" SATA hard drive support
- IPMI 2.0 remote management, Virtual media over LAN and KVM over IP capabilities

#### Lower TCO

- Modular design reduces deployment costs
- High computational density reduces facility costs
- High efficiency power supply reduces electricity costs
- Cable reduction improves cooling
- Remote management reduces maintenance cost

#### SuperBlade® Enclosures and Cabinet





\* SBE-710E Shown

Model	SBE-710E/Q Series
Server Blade	Up to 10 hot-plug server blades
Module Support	Supports Intel®/ AMD based blades
LED	Power LED, Fault LED
InfiniBand Switch	One hot-plug 4x DDR IB switch (710E) or up to two hot-plug 4x FDR/QDR IB switches (710Q)
Gigabit Ethernet Switch	Up to two hot-plug Gigabit Ethernet switches or pass-through modules Up to two hot-plug 10G pass-through modules (710E) Up to two hot-plug 10G Ethernet Switches (710Q)
Management Module	Up to two hot-plug management modules providing remote KVM and IPMI 2.0 functionalities
Power Supply	Hot-swap 1620W/2500W (710E) or 1620W/2500W/3000W (710Q) power supplies, N+1 redundancy
Cooling Design	Front to back
Dimensions (HxWxD)	12.2" x 17.6" x 29"







\* SBE-720E Shown

Model	SBE-720D/E Series
Server Blade	Up to 10 hot-plug server blades and TwinBlades
Module Support	Supports Intel®/ AMD based blades
LED	Power LED, Fault LED
InfiniBand Switch	Up to two hot-plug 4x FDR/QDR IB switches (720E only)
Gigabit Ethernet Switch	Up to two hot-plug Gigabit Ethernet switches or Pass thru model
Management Module	One hot-plug management module providing remote KVM and IPMI 2.0 functionalities
Power Supply	Hot-swap 2500W/3000W power supplies, N+1 redundancy
Cooling Design	Front to back
Dimensions (HxWxD)	12.2" x 17.6" x 29"

#### SuperBlade® Management

- Remotely manage and monitor server blades, power supplies, cooling fans, and networking switches
- IPMI 2.0 compliant, with KVM over LAN / KVM over IP
- Serial over LAN (SOL)
- Virtual Media Over LAN (Virtual USB Floppy/CD and Drive Redirection)
- LAN Alert-SNMP Trap
- Event Log
- OS Independent Hardware Health Monitor
- Remote Power Control
- Management Tools IPMIView, CLI (Command Line Interface)
- Supports RMCP & RMCP+ Protocols
- VGA port, 2x USB ports
- Remote Management Processor and sub-system

#### Specifications

- VGA port, 2 USB ports
- Remote Management Processor and sub-system
- 1x LAN port
- Video ADC, Video Compress FPGA
- IPMI Management
- Hot-Swap Capable
- GBX Backplane Connector



BMB-CMM-002 Mini CMM Installs in SBM-XEM-002M, SBM-IBS-Q3616M, SBM-IBS-Q3618M and SBM-XEM-X10SM CMM (Chassis Management Module)





SBM-CMM-003 TwinBlade® CMM Module

# SuperBlade® Servers

#### **Space Optimization**

CPU Socket cap MUST always be in position when the CPU is not installed.

When housed within a 19" EIA-310D industry-standard 42U rack, SuperBlade® servers reduce server footprint in the datacenter. Power, cooling and networking devices are removed from each individual server and positioned to the rear of the chassis thereby reducing the required amount of space while increasing flexibility to meet changing business demands. Up to twenty DP blade nodes can be installed in a 7U chassis. Compared to the rack space required by twenty individual 1U servers, the SuperBlade® provides over 65% space savings.

G34 TwinBlade®
2 DP Nodes in 1 Blade





G34 4-way Blade





Model	SBA-7222G-T2 (two nodes)	SBA-7142G-T4
Processors	Two 16/12/8/4-Core Opteron™ 6000 Series per node	Four 16/12/8/4-Core Opteron™ 6000 Series per node
CPUs per 42U Rack	240	240
Chipset	AMD SR5650+SP5100	AMD SR5650+SP5100
Memory Support	RDIMM or UDIMM DDR3 1866/1600/1333/1066 in 8 DIMMs slots /node	RDIMM or UDIMM DDR3 1866/1600/1333/1066 in 16 DIMMs slots
Max Memory	256GB(RDIMM)/32GB(UDIMM) /node	512GB(RDIMM)/64GB(UDIMM)
Expansion & Hard Disk Drive	Two hot-plug 2.5" SATA/SSD drives per node	Four hot-plug 2.5" SATA/SSD drives
Storage RAID	AMD SP5100 SATA RAID 0, 1	AMD SP5100 SATA RAID 0, 1
InfiniBand/10GbE Option	FDR/QDR(40Gb/s) InfiniBand or 10GbE/FCoE mezzanine HCA /node	FDR/QDR(40Gb/s) InfiniBand or 10GbE/FCoE mezzanine HCA
Ethernet Interface	Intel 82576 dual-port Gigabit Ethernet controller /node	Intel 82576 dual-port Gigabit Ethernet controller
Management	IPMI 2.0, KVM over IP, Virtual Media over LAN	IPMI 2.0, KVM over IP, Virtual Media over LAN
Graphics	Matrox G200eW	Matrox G200eW
LED Indicators	Power LED, UID/KVM LED, Networking LED, Fault LED /node	Power LED, UID/KVM LED, Networking LED, Fault LED
Operating Temp.	10-35° C non-condensing	10-35° C non-condensing

<sup>\*</sup> Opteron 6370P & 6338P are AMD new Opteron Processors w/ TDP 99W support (code named: Warsaw)

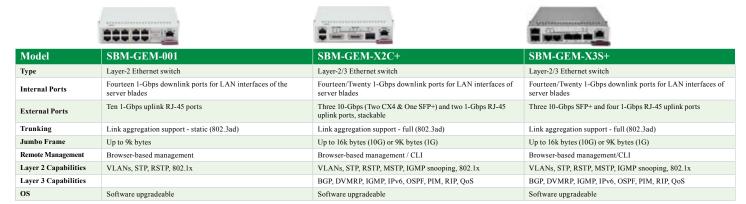
11.32" x 1.67" x 20.5"

Dimensions

11.32" x 1.67" x 20.5"

# SuperBlade® Networking

#### 1Gb Ethernet Switch Solutions



NEW!

#### 10Gb Ethernet and Converged Network Solutions

		Show were different at
Model	SBM-XEM-X10SM*	SBM-XEM-F8X4SM*
Type	Layer 2/3 10Gb Ethernet Switch	Data Center Converged Switch with FCoE
Internal Ports	10/20x internal 10Gb links to ports on mezzanine cards	10/20x internal 10Gb links to ports on mezzanine cards, support DCB, FCoE
External Ports	10/4x 10Gb Ethernet ports with SFP+ connectors	Ethernet: 4x 10Gb Ethernet ports with SFP+ connectors** Fibre Channel: 6x Fibre Channel ports: N ports, support 2, 4, 8Gbps
Jumbo Frame	Up to 16K bytes (10G) or 9K bytes (1G)	Up to 12K bytes (10 GbE) or 2112 bytes (FC)
Remote Management	Browser-based management/CLI	Browser-based management/CLI
Layer 2 Capabilities	4K VLANs, STP, RSTP, MSTP, IGMP snooping, 802.1x, 802.3ad (Full Link aggregation)	4K VLANs, STP, RSTP, MSTP, IGMP snooping, 802.1x, 802.3ad (Full Link aggregation)
Layer 3 Capabilities	ACL, DHCP, VRRP, RIP, OSPF, BGP, IPv6, RIPng, OSPFv3, IGMP, PIM, DVMRP, QoS	ACL, DHCP, VRRP, RIP, OSPF, BGP, IPv6, RIPng, OSPFv3, IGMP, PIM, DVMRP, QoS
FC Classes	N/A	2, 3
os	Software upgradeable	Software upgradeable
		** SBE-710 series enclosure only

**Key Advantages of Supermicro SuperBlade® Networking Solutions** 

**Highly Integrated-** Connection to SuperBlade® backplane optimizes networking flexibility

**Easy-to-Manage-** Unified and cost-effective solution for both LAN and SAN networking

**Power and Space Saving-** Compact designs for maximum efficiency

Easy to Install and Service- Quick snap-in/out installation from chassis rear

Reliability- Shared and redundant power supplies and cooling

**Cutting-Edge Technology**- Including 10GbE, Fiber Channel and FDR InfiniBand

#### **Ethernet Pass-Through Solutions**







Model	SBM-GEP-T20	SBM-GEM-002	SBM-XEM-002M*		
Internal Ports	Twenty 1-Gbps downlink ports for LAN interfaces of TwinBlade server blades	Fourteen 1-Gbps downlink ports for LAN interfaces of Server blades	Fourteen 10-Gbps downlink XAUI ports		
External Uplink Ports	Twenty 1-Gbps uplink RJ45 ports	Fourteen 1-Gbps uplink RJ-45 ports (Speed fixed at 1-Gbps - no auto negotiation)	Fourteen 10-Gbps uplink SFP+ ports (Speed fixed at 10-Gbps - no auto negotiation)		
Type	Ethernet pass-through module for TwinBlade SBE-720D and SBE-720E enclosure	Ethernet pass-through module for 10-Blade and 14-Blade enclosure	10G Ethernet pass-through module for 10-Blade (SBE-710E) and 14-Blade (SBE-714E) enclosure		

#### InfiniBand Switch Solutions







Model	SBM-IBS-F3616(M)*	SBM-IBS-Q3618/Q3616(M)*	SBM-IBS-001	
Internal Ports	20 4x FDR downlink ports	18/20 4x QDR downlink ports	14 internal 4x DDR	
External Uplink	16 4x FDR QSFP uplink ports	18/16 4x QDR QSFP uplink ports	10 external ports: 4x DDR-copper	
Type	4x FDR InfiniBand Switch	4x QDR InfiniBand switch	4x DDR InfiniBand switch	

#### InfiniBand/10GbE Mezzanine HCA













Model	AOC-XEH-iN2	AOC-IBH-X3QD	AOC-IBH-X3QS	AOC-IBH-XQD	AOC-IBH-XQS	AOC-IBH-XDD/ XDS
Chipset	Intel® 82599 (Niantic)	Mellanox ConnectX3	Mellanox ConnectX3	Mellanox ConnectX2	Mellanox ConnectX	Mellanox ConnectX
Ports	Dual-port 10Gbps Ethernet (FCoE support)	Dual-port 4x FDR-10 IB or 10GbE	Single-port 4x FDR-10 IB or 10GbE	Dual-port 4x QDR IB or 10GbE	Single-port 4x QDR IB or 10GbE	Dual/Single-port 4x DDR IB or 10GbE

<sup>\* &</sup>quot;M" version supports Mini-CMM (BMB-CMM-002)

# SuperBlade® Power Supply and Power Cable Guide

# Key Advantages of Supermicro High-Efficiency SuperBlade® Power Supplies

**Availability** - Non-stop power with N+1 redundant power supply modules

**Cost Saving** - With 94%+ Platinum Level efficiency, power consumption is significantly reduced, providing a real-world advantage for our environment

**Investment protection -** Power capacity headroom for future generation processors

**Easy installation** - Snap-in installation from the back of the chassis, hot-swappable in operation

Intelligent power infrastructure - Each power enclosure includes a power management module that monitors the power supplies and the power enclosure that connects to the blade management











Model	PWS-3K01-BR	PWS-2K53-BR	PWS-1K62-BR
Output	3000W	2500W	1620W
Type	Redundant Module (N+1)	Redundant Module (N+1)	Redundant Module (N+1)
+12V	250A	208A	132A (200~240VAC input) 100A (100-140 VAC input)
5VSB	16A	16A	16A
PFC	Yes	Yes	Yes
Peak Efficiency	94%+ (Platinum)	94%+ (Platinum)	93%+
Input AC Range	200~240VAC	200~240VAC	100~240VAC
Operating Conditions	Temp: -5 to 50° C Humidity: 5 to 95% RH	Temp: -5 to 50° C Humidity: 5 to 95% RH	Temp: -5 to 50° C Humidity: 5 to 95% RH
Fan Type	4x 90mm fans	4x 90mm fans	2x 90mm fans

At the current time, the Supermicro® SuperBlade® is shipping with power supplies of 1620 Watts, 2500 Watts and 3000 Watts. Although the Power Distribution Unit (Figure 3) that is recommended by Supermicro supports up to four power connections, only two connections should be made to each PDU. The PDU has a NEMA L6 connector that can plug into a NEMA L6 or equivalent socket. Each PDU, supporting two power supplies, must be plugged into a separate circuit that provides 30 Amps of power and a voltage ranging from 200-240V. Table 1 below illustrates the various Power Supplies offered by Supermicro. This table shows the maximum power requirement of each model.

Model	Watts	Low Volts	High Volts	Low Amps	10% Reserve	High Amps	10% Reserve	Max Amps
PWS-3K01-BR	3000	200	240	15	1.5	17.5	1.8	19.3
PWS-2K53-BR	2500	200	240	12.9	1.3	15.4	1.5	17
PWS-1K62-BR	1620	200	240	8.3	0.9	9.8	1.0	10.8
PWS-1K62-BR	1200	100	134	10.5	1.0	14.0	1.4	15.4

Table 1 - Power Supply Amperage Draw



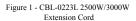




Figure 2 - CBL-0248L 1620W Extension Cord



Figure 3 - MCP-520-00036-0N optional Power Distribution Unit (PDU) with NEMA L6 plug

For a single 30 Amp circuit supplying a PDU, no more than 2 power supplies may be connected to the PDU.

The Supermicro SuperBlade® product includes a power extension cord CBL-0223L for 2500W/3000W (Figure 1) or CBL-0248L for 1400W/1620W (Figure 2) power supplies. The power cord connects the power supply to a Power Distribution Unit (Figure 3 - optional PDU) in an IT room. The PDU should supply input voltage ranging from 200V to 240V AC. As stated above, the circuit that the PDU plugs into should provide 30 Amps that is not shared by any other device.

Before beginning receptacle installation, consider the following:

- Observe all local electrical codes and practices.
- Ensure that the AC power receptacle is wired to the site AC power via conductors routed through flexible metal conduit or via approved AC power cable before installation.
- · Ensure that AC power cord is properly sized, service rated, temperature rated, and complies with all applicable codes and regulations.
- Ensure that the conductors in conduit are properly sized, service rated, temperature rated, color coded, and comply with all applicable codes and regulations.
- Ensure that the AC power cord or conduit is long enough to reach from the site AC power junction box to a location within the distance required for the connection.
- Ensure that the number of power supplies connected to one circuit do not exceed the rated amperage of the circuit.

Please see table below which lists some examples of international power cords that are compatible with Supermicro.

Country	Australia	China	Isreal	India / S. Africa	Italy/S. America	Euro	UK	US	US
Model	CBL-0238L (2500W/3000W)	CBL-0239L (2500W/3000W)	CBL-0243L (2500W/3000W)	CBL-0245L (2500W/3000W)	CBL-0244L (2500W/3000W)	CBL-0240L (2500W/3000W)	CBL-0241L (2500W)	CBL-0247L (2500W/3000W)	CBL-0250L (1620W)
Length	2.5m	2.5m	2.5m	2.5m	2.5m	2.5m	2.5m	2.5m	6ft
Inlet	AS 3112	GB-2099-1-1996	SI32	BS 546	CEI 23-16	"Schuko" CEE 7/7	BS 1363	NEMA 6-20P or equivalent	NEMA 5-20P
Equip Outset	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C19	IEC-60320-C13
Certificate	SAA	CCEE	SII	SABS	VDE, HAR	VDE, KEMA, CEBEC, NEMKO, DEMKO, SETI, OVE, SEV	BSI	UL	UL/CUL
Current	15A	16A	16A	16A	16A	15A	15A	20A	15A
Voltage	250V	250V	250V	250V	250V	250V	250V	250V	250V
Image	TO CO	OF-		The state of the s	PA		79	4	

# **Network Adapters**

## **Faster, More Flexible Networking**

With outstanding performance, high power efficiency and excellent value, Supermicro's network adapters can help improve network throughput and application performance through features that maximize bandwidth and offload CPU resourcesFrom 10Gb Ethernet to InfiniBand technologies, dual-port and quad-port connectivity, in UIO (Universal I/O) and standard form factors, Supermicro's network adapters are optimized for the most demanding multi-core computing systems.

#### GbE Controllers





37 11	4 OC 11C :44	AOC CCD :3M
Model	AOC-UG-i4*	AOC-CGP-i2M
Туре	UIO	Micro-LP
Description	Full-height quad-port 1GbE	Dual-port GbE
Interface	PCI-E x8	PCI-E x4
Port	4 RJ45 ports	2 RJ45 ports
Speed	1 Gb/port	1Gb/port
Controller	2 Intel® 82571EB	Intel® i350
Dimension (LxW) (without end brackets)	6.57" x 3.86" (16.69 x 9.80cm)	4.45" x 1.32" (11.3 x 3.35cm)
Compatible Motherboards	All Supermicro UIO Mother- boards	H8SME-F
Compatible Servers	All Supermicro UIO Servers	3012MA-H12TRF

#### IB Controllers









Model	AOC-CIBF-m1M	AOC-UIBF-m1	AOC-UIBQ-m2	AOC-UIBQ-m1
Type	Micro-LP	UIO	UIO	UIO
Description	MicroLP single-port IB FDR/40G Ethernet	Low-profile single-port IB FDR/40G Ethernet	Low-profile dual-port IB QDR/10G Ethernet	Low-profile single-port IB QDR/10G Ethernet
Interface	PCI-E 3.0 x8	PCI-E x8	PCI-E x8 2.0 (5GT/s)	PCI-E x8 2.0 (5GT/s)
Port	1 QSFP port / 2 USB ports	1 QSFP port	2 QSFP ports	1 QSFP port
Speed	56Gb/port (IB) or 40Gb/port (Ethernet)	56Gb/port (IB) or 40Gb/port (Ethernet)	40Gb/port (IB) or 10Gb/port (Ethernet)	40 Gb/port (IB) or 10Gb/port (Ethernet)
Controller	Mellanox® ConnectX-3 FDR	Mellanox® ConnectX-3 FDR	Mellanox® ConnectX-2 QDR	Mellanox® ConnectX-2 QDR
Dimension (LxW) (without end brackets)	4.45" x 1.32" (11.3 x 3.35cm)	5.63" x 2.50" (14.29 x 6.35cm)	5.63" x 2.50" (14.29 x 6.35cm)	5.63" x 2.50" (14.29 x 6.35cm)
Compatible Motherboards	H8SME-F	All UIO Motherboards	All UIO motherboards	All UIO motherboards
Compatible Servers	3012MA-H12TRF	All UIO Systems	All UIO servers	All UIO servers

#### 10GbE Controllers









SFP+ Transceiver

Model	AOC-STG-b4S	AOC-CTG-i1SM	AOC-UTG-i2*	AOC-E10GSFPSR
Type	Standard Low-profile	Micro-LP	UIO	SFP+ Transceiver 1000Base-SX /
Description	Standard Low-profile 10GbE	Single-port 10GbE	Full-height dual-port 10GbE	10GBase-SR plug-in module
Interface	PCI-E x8	PCI-E x8	PCI-E x8	Cabling Type: MMF 62.5/50 μm
Port	4 SFP+	1 SFP+ port / 2 USB ports	2 CX4 ports	Products supported: Motherboards: X9DRW-7TPF+, X9DRW-ITPF+,
Speed	10Gb/port	10Gb/port	10 Gb/port	X9DRW-7TPF, X9DRW-ITPF, X9DB3-TPF, X9DBi-TPF, X8DTU-6TF+,
Controller	Broadcom® BCM57840S	Intel® 82599EN	Intel® 82598EB	Systems: 6027R-72RFTP+, 2027R-72RFTP+, 1027R-
Dimension (LxW) (without end brackets)	5.4" x 2.73" (13.72cm x 6.90cm)	4.45" x 1.32" (11.3 x 3.35cm)	6.57" x 3.86" (16.69 x 9.80cm)	72RFTP, 6017R-72RFTP, 1027R-72BRFTP, 1026T-6RFT+, 6016T-6RFT+, 2026T-6RFT+, 6026T-6RFT+, SBM-GEM-X2C+, SBM-GEM-
Compatible Motherboards	Al MBs with a PCI-E x8 slot	H8SME-F	All UIO motherboards	X3S Add-on Cards: AOC-STGN-i2S, AOC-CTG-i1S,
Compatible Servers	All servers with a PCI-E x8 slot	3012MA-H12HTRF	All UIO servers	AOC-CTG-i2S, AOC-STGN-i1S Switches: SSE-X3348S, SSE-X3348SR, SSE- X24S, SSE-X24SR, SSE-G24-TG4, SSE-G48- TG4, SSE-X74S

<sup>\*</sup> Standard form factor is available as integrated solution with Supermicro server and motherboards.

# **HBA and SAS RAID Cards**

#### NEW! SAS3 12Gbps













Model name	AOC-S3108L-H8iR†	AOC-S3008L-L8e <sup>†</sup>	AOC-S3008L-L8i <sup>†</sup>	AOC-S2208L-H8iR	AOC-S2308L-L8e
Туре	Standard	Standard	Standard	Standard	Standard
Controller/IOP	LSISAS 3108	LSISAS 3008	LSISAS 3008	LSISAS 2208	LSISAS 2308
SAS Port	8 ports, 12Gbps per port, 8 Internal, Low Profile, 240 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 122 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 63 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile, 240 SATA/SAS Drives,	8 ports, 6Gbps per port, 8 Internal, Low Profile, 122 SATA/SAS Drives
RAID	RAID 0,1,5,6,10,50,60	IT/HBA Mode	RAID 0,1,10	RAID 0,1,5,6,10,50,60	IT/HBA Mode
Onboard Cache	2GB DDR3 on-card cache Optional SuperCap: BTR-TFM8G-LSICVM02. Installation kit PN =MCP-240- 00127-0N	-	-	1GB DDR3 on-card cache w/ Battery Back-up or SuperCap, Optional Battery Backup Unit: BTR-0022L-1Si00279 / MCP-450-00001-0N / CBL-0477L / Ambient Temp 45C; SuperCap option: BTR-TFM8G-LSiCVM02. Installation kit PN = MCP-240-00127-0N	-











Model	AOC-S2308L-L8i	AOC-SAS2LP-H8iR	AOC-SAS2LP-H8iR-16DD	AOC-USAS2LP-H8iR*	AOC-USAS2-L8iR
Type	Standard	Standard	Standard	UIO	UIO
Controller/IOP	LSISAS 2308	LSISAS 2108	LSISAS 2108	LSISAS 2108	LSISAS 2008
SAS Port	8 ports, 6Gbps per port, 8 Internal, Low Profile, 63 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile, 240 SATA/SAS Drives	8 ports, 6Gbps per port 8 Internal, Low Profile 16 SATA/SAS Drives	8 ports, 6Gbps per port 8 Internal, Low Profile	8 ports, 6Gbps per port 8 Internal
RAID	RAID 0,1,10	RAID 0,1,5,6,10,50,60	RAID 0,1,5,6,10,50,60	RAID 0,1,5,6,10,50,60	RAID 0,1,5,10
Onboard Cache	-	512MB DDR2 on-card cache W/ Optional Battery Backup Unit: BTR- 0023L-LS100264	512MB DDR2 on-card cache w/ Optional Battery Backup Unit: BTR-0023L-LSI00264	512 MB DDR2 on-card cache w/ Optional Battery Backup Unit: BTR-0023L-LSI00264	-











Model	AOC-USAS2-L8i	AOC-USAS2-L8E	AOC-SAS2LP-H4iR	AOC-SAS2LP-MV8
Туре	UIO	UIO	Standard	Standard
Controller/IOP	LSISAS 2008	LSISAS 2008	LSISAS 2108	Marvel 9480 based
SAS Port	8 ports, 6Gbps per port 8 Internal	8 ports, 6Gbps per port 8 Internal	8 ports, 6Gbps per port, 4 Internal. 4 external, Low Profile, 240 SATA/SAS Drives	8 ports, 6Gbps per port 8 Internal, Low Profile
RAID	RAID 0,1,10,1E	IT mode / HBA	RAID 0,1,5,6,10,50,60	НВА
Onboard Cache	-	-	512MB DDR2 on-card cache w/ battry W/ Optional Battery Backup Unit: BTR-0023L-LSI00264	-











Model	AOC-USAS-L8i	AOC-USASLP-L8i*	AOC-USAS-L4i	AOC-USAS-L4iR	AOC-SASLP-MV8
Туре	UIO	UIO	UIO	UIO	Standard
Controller/IOP	LSISAS 1068E	LSISAS 1068E	LSISAS 1068E	LSISAS 1068E	Marvell Hercules-2
SAS Port	8 ports, 3Gbps per port 8 Internal	8 ports, 3Gbps per port 8 Internal, Low Profile	8 ports, 3Gbps per port 4 Internal, 4 External	8 ports, 3Gbps per port 4 Internal, 4 External	8 ports, 3Gbps per port 8 Internal, Low Profile
RAID	IT/HBA Mode	IT/HBA Mode	RAID 0,1,10	RAID 0,1,5,10	HBA only
Onboard Cache	-	-	-	-	-

<sup>\*</sup> Applies to 2U low-profile, 3U and 4U chassis.

† Available as integrated solutions with Supermicro servers.

# **UIO Riser Cards**



	_				•	•
Model	RSC-R1UU-2E8	RSC-R1UU-2U	RSC-R1UU-E16	RSC-R1UU-UE8	RSC-R1UU-E8E16	RSC-R1UU-UE16
Position	UIO 1U Left	UIO 1U Left	UIO 1U Left	UIO 1U Left	UIO 1U Left	UIO 1U Left
Motherboard Fit Type	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)
Riser Card Output Type	2 (PCI-E x8)	2 UIO (PCI-E x8)	1 PCI-E x16	1 UIO (PCI-E x8), 1 PCI-E x8	1 PCI-E x8, PCI-E x16	1 UIO(PCI-E x8) 1 PCI-E x16
Design Type	Passive	Passive	Passive	Passive	Passive	Passive
Motherboards	H8DMU+, H8SMU, H8DGU series	H8DMU+, H8SMU, H8DGU series	H8DMU+, H8SMU, H8DGU series	H8DMU+, H8SMU, H8DGU series	H8DGU series	H8DGU series
Chassis	UIO Chassis	UIO Chassis	UIO Chassis	UIO Chassis*	UIO Chassis*	UIO Chassis*
Gen2 Support	Yes, depending on MB slots	Yes, depending on MB slots	Yes, depending on MB slots			
GPU Support	No	No	Yes	No	No	No



				•		
Model	RSC-R1UU-E8R+	RSC-R2UU-2U	RSC-R2UU-A4E8	RSC-R2UU-A4E8+	RSC-R2UU-UA3E8	RSC-R2UU-UA3E8+
Position	UIO 1U Right	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Left
Motherboard Fit Type	PCI-E x8	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)
Riser Card Output Type	1 PCI-E x8	2 UIO	4 PCI-E x8	4 PCI-E x8	1 UIO, 3 PCI-E x8	1 UIO, 3 PCI-E x8
Design Type	Passive	Passive	Active	Active	Active	Active
Motherboards	H8SMU	H8DMU+, H8SMU, H8DGU series,	H8DMU+, H8SMU	H8DGU series	H8DMU+, H8SMU	H8DGU series
Chassis	UIO Chassis	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis
Gen2 Support	No	Yes, depending on MB slots	No	Yes	No	Yes
GPU Support	No	No	No	No	No	No



•		•	*	•
RSC-R2UU-UE8	RSC-R2UU-2E8	RSC-R2UU-3E8G	RSC-R2UU-E8E16	RSC-R2UU-2E8R
UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Left	UIO 2U Right
Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	Universal Slot (UIO)	PCI-E x16
1 UIO, 1 PCI-E x8	2 PCI-E x8	3 PCI-E x8	1 PCI-E x16, 1 PCI-E x8	2 PCI-E x8
Passive	Passive	Passive	Passive	Passive
H8DMU+, H8SMU	H8DMU+, H8SMU	H8DGU series	H8DGU series	H8DMU+
UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*	UIO Chassis*
Yes, depending on MB slots	Yes, depending on MB slots	Yes	Yes	Yes, depending on MB slots
No	No	No	No	No
	UIO 2U Left Universal Slot (UIO) 1 UIO, 1 PCI-E x8 Passive H8DMU+, H8SMU UIO Chassis* Yes, depending on MB slots	UIO 2U Left Universal Slot (UIO) UNIVERSAL SLOT SLOT SLOT SLOT SLOT SLOT SLOT SLO	UIO 2U Left UIO 2U Left Universal Slot (UIO)  1 UIO, 1 PCI-E x8 2 PCI-E x8 3 PCI-E x8 Passive Passive Passive H8DMU+, H8SMU H8DGU series UIO Chassis* UIO Chassis* Ves, depending on MB slots Yes, depending on MB slots	UIO 2U Left Universal Slot (UIO)  1 UIO, 1 PCI-E x8 3 PCI-E x8 1 PCI-E x8 1 PCI-E x8  Passive Passive Passive Passive Passive Passive UIO Chassis* UIO Chassis* UIO Chassis* UIO Chassis* UIO Chassis* UIO Chassis* Ves, depending on MB slots Yes Yes

 $<sup>*</sup> For \ detailed \ information, please \ contact \ your \ Supermicro \ sales \ representative; \ or, \ visit: \ http://www.supermicro.com/support/resources/Riser/riser.aspx$ 

# **Riser Cards**











Model	RSC-RR1U-E16	RSC-RR1U-E8	RSC-R1U-E16R	RSC-R1UG-E16S*	RSC-RR1U-EHT
Position	1U Left	1U Left	1U RHS	1U Left	1U Left
Motherboard Fit Type	PCI-E x16	PCI-E x8	Universal Slot (UIO)	PCI-E x16	PCI- E x8 + HT connector
Riser Card Output Type	1 PCI-E x16	1 PCI-E x8	1 PCI-E x16	1 PCI-E x16	1 PCI- E x8, 1 HT/HTX
Design Type	Passive	Passive	Passive	Passive	Passive
Motherboards	H8SMi-2, H8QME-2+, H8QM8-2+, H8QM3-2+, H8QMi-2+, H8QI6+-F, H8SCM(-F), H8SGL(-F), H8QG6+-F, H8QGi+-F, H8QIi-F, H8QGL-iF+, H8QGI-6F+, H8QI7/i+-LN4F	H8DME-2, H8DM8-2, H8SML-7/i(F)	H8DGT-HLIBQF/HLF, H8DGT- HIBQF/HTF, H8DCT-IBQF/H8DCT- F / H8DCT-HLN4F	H8DGG-QF	H8QM8-2+/E-2+
Chassis	SC111, SC112, SC818+, SC113, SC503L SC811, SC812, SC813, SC815, SC502, SC512	SC815	SC827 /217	SC118G	SC818+
Gen2 Support	Yes, depending on MB slots	Yes, depending on MB slots	Yes, depending on MB slots	Yes	No
GPU Support	No	No	No	Yes	No











Model	RSC-RR1U-HT	RSC-RR1U-EL	RSC-R1U-UT	RSC-R1U-UL	RSC-R1UG-E16
Position	1U Left	1U Left	RHS	1U Left	1U Left
Motherboard Fit Type	PCI-E x8 + HT connector	Universal PCI (SXB-E) Slot	PCI-E x8	PCI-E x8	Universal Slot (UIO)
Riser Card Output Type	InfiniBand Card (Pathscale)	1 PCI-E x8	1 UIO	UIO Slot	1 PCI-E x16
Design Type	Passive	Passive	Passive	Passive	Passive
Motherboards	H8QGL-iF+/6F+			H8QGL-6/iF+ H8QG6/i+-F	H8DGG-QF
Chassis	SC818	SC812, SC815	SC808T, SC809T/TQ	SC818	SC818G, SC118G
Gen2 Support	No	No	No	Yes, depending on MB slots	Yes
GPU Support	No	No	No	No	Yes













Model	CSE-RR1U-ELP	RSC-R2U-E8	RSC-R2U-EHT	RSC-R2UE-A3E8	RSC-R2UT-2E8R	RSC-R2UT-E16R
Position	1U Right	2U Left	2U Left	2U Left	2U Right	2U Right
Motherboard Fit Type	Universal PCI Slot	PCI-E x8 Slot	PCI-E x16 + HT connector	PCI-E x8 Slot with SEPC	PCI-E x16 Slot	PCI-E x16 Slot
Riser Card Output Type	1 PCI-E x8 (low profile)	1 PCI-E x8 Slot	1 PCI-E x16, 1 HTX	3 PCI-E x8	2 PCI-E x8	1 PCI-E x16
Design Type	Passive	Passive	Passive	Active	Passive	Passive
Motherboards	H8DMR-82/i2	H8SCM	H8QGL-6/iF+	H8DM8-2, H8DME-2, H8DM3-2, H8DMi-2	H8DCT Series	H8DGT series
Chassis	SC812, SC815	SC216*, SC825*, SC826*	SC828	SC825*, SC216*	SC827HD-R1400B	SC827HD-R1400B
Gen2 Support	No	No	Yes	No	Yes	Yes
GPU Support	No	No	Yes	No	No	Yes

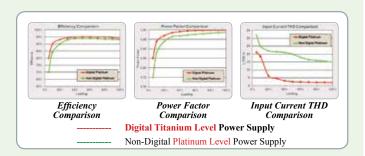
 $<sup>*</sup> For \ detailed \ information, please \ contact \ your \ Supermicro \ sales \ representative; \ or, \ visit: \ http://www.supermicro.com/support/resources/Riser/riser.aspx$ 

# **Power Supplies**

## **Digital Switching Power Supplies**

## 96% Titanium Level Power Efficiency!

- New generation Digital Switching Power Supplies
- Improved power efficiency (5~10%) in light loading
- Improved power factory correction (5~10%) in light loading
- Reduce current THD (15%) power transmission loss
- Real-time monitoring & enhanced system reliability



















Model	PWS-1K68A-1R	PWS-1K28P-SQ	PWS-2K02P-1R/ PWS-2K02F-1R	PWS-982P-1R	PWS-1K43F-1R	PWS-605P-1H	PWS-341P-1H
Total Output Power	800W/ 1600W	1000W / 1280W	1100W/ 1400W 1800W/ 1980W/ 2000W	850W/ 980W	1200W/ 1400W	600W	340W
Input	100 - 127Vac/ 200 - 240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60hz	100-240Vac / 50-60hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz
Form Factor	1U	1U	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	36 x 7.6 x 4	36 x 7.6 x 4	36 x 7.6 x 4	32.2 x 5.45 x 4	29.8 x 10.5 x 4	28 x 7.6 x 4	28 x 7.6 x 4
Output Type*	Backplanes available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	24pin ATX Cable	24pin ATX Cable
Redundant	Yes	Yes	Yes	Yes	Yes	N/A	N/A
I <sup>2</sup> C Remote Monitoring	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMbus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus
+5V	-	-	-	-	-	18A	16A
+12V	66A (100Vac-127Vac) 133A (200Vac-240Vac)	83A (100-140Vac) 106.7A (180-240Vac)	91.7A (100-120Vac) 116.7A (120-140Vac) 150A (200-220Vac) 165A (220-230Vac) 166.7A (230-240Vac) UL/eUL: 166.7A (200-240Vac)	70A (100-140Vac) 81A (180-240Vac)	100A (100-140Vac) 117A (180-240Vac)	49A	28A
+3.3V	-	-	-	-	-	15A	15A
5VSB	1A	4A	4A	4A	6A	3A	3A
-12V	-	-	-	<u>-</u>	-	.5A	.5A
Efficiency	80 PLUS TITAMUM	PLUS PLATIVUII	80 PLUS PLATRUUM	80 PLUS PLATNUIT	80 PLUS PLATINUIT	80 PLUS PLATNUIT	80 PLUS PLATNUII

## BBP® (Battery Backup Power) Solutions

## Evolutionary Design to Replace UPS!

- Increases overall data center power efficiency
- · Hot-swappable and easy deployed
- Eliminates UPS while maintaining system power stability and redundancy
- Frees UPS space to increase server density deployment
- Flexible configurations available for current Supermicro systems
- More cost-effective than traditional Datacenter UPS
- Fits most Supermicro SuperServers, Storage, and Embedded solutions







Model	PWS-206B-1R	PWS-1K03B-1R
Total Output Power	200W / 5 minutes	1000W / 2.5 minutes
Input	Work w/ PWS-406P/ 503P/606P/703P-1R	Work w/ PWS-1K28P-SQ/ PWS-920P-SQ/ PWS-741P-1R/PWS-501P-1R
Form Factor	1U	1U
Dimension (LxWxH) cm	22 x 5.45 x 4	36 x 7.6 x 4
Output Type*	Backplanes available	Backplanes available
Redundant	Yes	Yes
I <sup>2</sup> C Remote Monitoring	FRU/Smart battery I <sup>2</sup> C	FRU/Smart battery I <sup>2</sup> C
+5V	-	-
+12V	16.7A	83.3A
+3.3V	-	-
5VSB	2A	4A
-12V	-	-
Efficiency	Online mode power consumption <1W	Online mode power consumption <1W

For detailed information, please contact your Supermicro sales representative; visit: http://www.supermicro.com/BBP

# **Power Supplies**



















Model	PWS-741P-1R	PWS-501P-1R	PWS-920P-SQ	PWS-504P-1R	PWS-503P-1R	PWS-1K62P-1R	PWS-1K81P-1R	PWS-606P-1R	PWS-920P-1R	PWS-1K41P-1R
Total Output Power	740W	500W	920W	500W	500W	1000/1200/ 1620W	1000/1200/ 1800W	600W	920W	1100W/ 1400W
Input	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60hz	100-240Vac/ 50-60hz	100-240Vac/ 50-60hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz
Form Factor	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	36 x 7.6 x 4	36 x 7.6 x 4	36 x 7.6 x 4	32.2 x 5.45 x 4	32.2 x 5 x 4	36 x 7.6 x 4	30.5 x 9.1 x 4	22 x 5.45 x 4	36 x 7.6 x 4	36 x 7.6 x 4
Output Type*	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Avail- able	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available
Redundant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I <sup>2</sup> C Remote Monitoring	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus					
+5V	-	-	-	-	-	-	-	-	-	-
+12V	61.7A	41.7A	75A	42A	42A	84A (100-120Vac) 100A (120-140Vac) 135A (180-264Vac)	84A (100-120Vac) 100A (120-140Vac) 150A (180- 264Vac)	50A	75A	92A (100-140Vac) 116A (180-240Vac)
+3.3V	-	-	-	-	-	-	- '	-	-	-
5VSB	4A	4A	4A	3A	3A	4A	4A	3A	4A	4A
-12V	-	-	-	-	-	-	-	-	-	-
Efficiency	80 PLUS: PLATINUM	80 PLUS PLATMUII	80 PLUS PLATRUM	80 PLUS PLATRUM	80 PLUS PLATRUM	80 PLUS PLATRUII	80 PLUS PLATNUU	PLUS PLATINUM	80 PLUS PLATRUM	80 PLUS GOLD

## **DC** Power Solution

















			(PR)	CS	3	men dief.		3		JUNE 1	103
Model	PWS-1K21P-1R	PWS-721P-1R	PWS-406P-1R	PWS-704P-1R	PWS-703P-1R	PWS-1K41F-1R	PWS-1K28D-240	PWS-503D-240	PWS-654-1R	PWS-1K11P-1R	PWS-661P-1R
Total Output Power	1000W/1200W	720W	400W	700W/750W	700W/750W	1200W/1400W	1280W	500W	650W	850W/1010W	660W
Input	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	100-240Vac/ 50-60Hz	200-240Vdc/ 200-240Vac/ 50-60Hz	200-240Vdc/ 200-240Vac/ 50-60Hz	-44Vdc to -72Vdc	-36Vdc to -76Vdc	-42Vdc to -72Vdc
Form Factor	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	36 x 7.6 x 4	36 x 7.6 x 4	22 x 5.45 x 4	32.2 x 5.45 x 4	32.2 x 5 x 4	29.8 x 10.5 x 4	36 x 7.6 x 4	32.2 x 5 x 4	32.2 x 5.45 x 4	36 x 7.6 x 4	32.2 x 5.05 x 4
Output Type*	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available
Redundant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I <sup>2</sup> C Remote Monitoring	FRU Data and PMBus	PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data	FRU Data and PMBus	FRU Data and PMbus
+5V	-	-	-	-	-	-	-	-	-	-	-
+12V	83A(100-140Vac) 100A(180-240Vac)	59A	33A	58A (100- 140Vac) 62A (180- 240Vac)	58A (100- 140Vac) 62A (180- 240Vac)	100A (100-140Vac) 116A (180-240Vac)		42A	53.28A	70A (-36 to -42Vdc) 83A (-43 to -76Vdc)	55A
+3.3V	-	-	-	-	-	-	-	-	-	-	-
5VSB	4A	3A	3A	3A	3A	6A	4A	3A	3A	4A	4A
-12V	-	-	-	-	-	-	-	-	-	-	
Efficiency	80 PLUS GOLD	80 PLUS GOLD	80 PLUS GOLD	80 PLUS GOLD	80 PLUS GOLD	80 PLUS GOLD	Platinum (Certification TBA)	Platinum (Certification TBA)	Typical 90%+	Typical 90%+	Typical 90%+























									-050		
Model	PWS-441P-1H	PWS-653-2H	PWS-203-1H	PWS-563-1H/20	PWS-333-1H/20	PWS-601-1H	PWS-351-1H	PWS-1K25P-PQ	PWS-903-PQ	PWS-665-PQ	PWS-502-PQ
Total Output Power	440W/480W	600W/650W	200W	560W/600W	330W/380W	600W/680W	350W	1000/1200W	900W	665W	500W
Inmut	100-240Vac /	100-240Vac /	100-240Vac/	100-240Vac/	100-240Vac/	100-240Vac/	100-240Vac/	100-240Vac/	100-240Vac/	100-240Vac/	100-240Vac/
Input	50-60hz	50-60hz	50-60Hz	50-60Hz	50-60Hz	50-60Hz	50-60Hz	50-60hz	50-60Hz	50-60Hz	50-60Hz
Form Factor	1U	2U	1U	1U	1U	1U	1U	E-ATX, PS2	E-ATX, PS2	E-ATX, PS2	Standard ATX
Dimension (LxWxH) cm	22 x 10 x 4	30 x 10.6 x 8.4	19.3 x 7.6 x 4	28 x 7.6 x 4	28 x 7.6 x 4	22 x 10 x 4	22 x 10 x 4	18.5 x 15 x 8.6	19 x 15 x 8.6	18.5 x 15 x 8.6	14 x 15 x 8.6
	24pin	24pin	20pin	20 or 24pin	20 or 24pin	24pin	24pin	24pin	24 pin	24 pin	24pin
Output Type*	ATX Cable	ATX Cable	ATX Cable	ATX Cable	ATX Cable	ATX Cable	ATX Cable	ATX Cable	ATX Cable	ATX Cable	ATX Cable
Redundant	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
I <sup>2</sup> C Remote Monitoring	FRU Data and PMbus	N/A	N/A	N/A	N/A	N/A	N/A	FRU Data and PMBus	N/A	N/A	N/A
+5V	18A	30A	8A	18A	18A	20A	18A	20A	25A	30A	20A
	35.8A (100- 140Vac)	49A (100-140Vac)		46 A (100 140Vas)	274 (100 140)(22)	49A (100-140Vac)		83A (100- 114Vac)	12V1 25A; 12V2 25A;		12V1 16A; 12V2 18A;
+12V	39.1A (180-	54A (180-240Vac)	16A			56A (180-240Vac)	29A	99A (115-	12V3 25A; 12V4	54A	12V3 18A; 12V4
	240Vac)	34A (160-240 vac)		49A (160-240 vac)	31A (160-240 vac)	30A (100-240 vac)		240Vac)	25A, 12 V4		18A
+3.3V	15A	25A	8A	15A	15A	16A	15A	20A	25A	24A	15A
5VSB	3A	4A	2A	3A	3A	3A	3A	3A	4A	6A	3A
-12V	.5A	.5A	.5A	.5A	.5A	.5A	.5A	.5A	.5A	.5A	.5A
Efficiency	80 PLUS PLATINUM	80 PLUS GOLD	80 PLUS GOLD	80 PLUS GOLD	80 PLUS GOLD	80 PLUS GOLD	80 PLUS GOLD	80 PLUS PLATNUII	80 PLUS GOLD	BRONZE	80 PLUS BRONZE

# Heatsinks



















SNK-P0042P 1U Passive Heatsink

SNK-P0043P 2U and above Passive Heatsink

SNK-P0022+ 1U Passive Heatsink

SNK-P0023P(+) 2U and above Passive Heatsink

SNK-P0026 1U Passive Heatsink for AM2 Socket

SNK-P0027AP4 4-wire Active Heatsink for 4U/Tower

SNK-P0048AP4 SNK-P0050AP4 2U Active Heatsink 4U Active Heatsink

SNK-P0037P 1U Passive Heatsink

Heatsink	<b>1</b> U	2U	3U	41	U
МВ	Passive	Passive / Active	Passive	Passive	Active
H8SML-7/i(F)	SNK-P0026	N/A	N/A	N/A	SNK-P0027AP4
H8SCM(-F)	SNK-P0022+	SNK-P0023P(+)	N/A	N/A	SNK-P0024AP4
H8SSL-i2	SNK-P0026	N/A	N/A	N/A	SNK-P0027AP4
H8SMU	SNK-P0026	N/A	N/A	N/A	N/A
H8SMi/A-2	SNK-P0026	N/A	N/A	N/A	SNK-P0027AP4
H8SGL(-F)	SNK-P0042P	SNK-P0043P	SNK-P0043P	N/A	N/A
H8DCL-6/i (F)	N/A	SNK-P0048AP4**	SNK-P0048AP4**	N/A	SNK-P0024AP4
H8DCT-HLN4F/ HIBOF	SNK-P0037P	N/A	N/A	N/A	N/A
H8DCT-F/IBQF	SNK-P0022+	N/A	N/A	N/A	N/A
H8DGG-QF	SNK-P0042P	N/A	N/A	N/A	N/A
H8DGT-HLF/ HLIBQF	SNK-P0037P	N/A	N/A	N/A	N/A
H8DGT-HF/ HIBQF	SNK-P0042P	N/A	N/A	N/A	N/A
H8DGG-QF	SNK-P0042P	N/A	N/A	N/A	N/A
H8DMR-82/ i2	SNK-P0022+	N/A	N/A	N/A	N/A
H8DM8/E-2	SNK-P0022+	SNK-P0023P	N/A	SNK-P0023P	N/A
H8DM3/i-2	N/A	SNK-P0023P	N/A	SNK-P0023P	N/A
H8DMU+	SNK-P0022+	SNK-P0023P	N/A	N/A	N/A
H8DGU-LN4F+	SNK-P0042P	SNK-P0043P	N/A	N/A	N/A
H8DGU-(F)	SNK-P0042P	SNK-P0043P	N/A	N/A	N/A
H8DG6/i(-F)	SNK-P0042P	SNK-P0043P / SNK-P0050AP4***	N/A	SNK-P0043P	SNK-P0050AP4*
H8DMT-INF+	SNK-P0022+	N/A	N/A	N/A	N/A
H8DA3/i-2	N/A	N/A	N/A	N/A	SNK-P0024AP4
H8DA8/E-2	N/A	N/A	N/A	N/A	N/A
H8DMT/-IBX(F)	SNK-P0022+	N/A	N/A	N/A	N/A
H8DI3/i+(-F)	N/A	SNK-P0023P	N/A	N/A	N/A
H8DA6+/i+(-F)	N/A	N/A	N/A	N/A	SNK-P0024AP4
H8QGL-6F/iF	SNK-P0042P	SNK-P0043P	SNK-P0043P	SNK-P0043P	N/A
H8QGL-6F+/iF+	SNK-P0042P	SNK-P0043P	SNK-P0043P	SNK-P0043P	N/A
H8QM8/E-2	N/A	SNK-P0023P+	N/A	SNK-P0023P+	N/A
H8QM8/E-2+	SNK-P0022+	SNK-P0023P+	N/A	N/A	N/A
H8QM3/i-2	N/A	SNK-P0023P+	N/A	SNK-P0023P+	N/A
H8QM3/i-2+	SNK-P0022+	N/A	N/A	N/A	N/A
H8QI6/i+(-F)	SNK-P0022+	N/A	N/A	N/A	N/A
H8QI6/i-F	N/A	SNK-P0023P+	N/A	SNK-P0023P	N/A
H8QG6/i+-F	SNK-P0042P	N/A	N/A	N/A	N/A
H8QG6/i-F	N/A	SNK-P0043P	N/A	SNK-P0043P	N/A
H8QG7/i+-LN4F	SNK-P0042P	N/A	N/A	N/A	N/A
H8QG7/i-LN4F	N/A	SNK-P0043P	N/A	SNK-P0043P	N/A

<sup>\*</sup> Requires BKT-0050L-G34

# **Layer 2 Ethernet Switches**

Rear View

Cost-effective 1-Gigabit Ethernet networking including a Power-over-Ethernet model and featuring Energy Efficient Ethernet – We Keep IT Green®



Rear view		0-10-10-10-10-10-10-10-10-10-10-10-10-10	
Model	SSE-G2252P (52 ports; 48 with Power-over-Ethernet)	SSE-G2252 (52 ports)	
General Specifications:	<ul> <li>48 RJ45 10/100/1000 Mbps Ports</li> <li>4 SFP 1-G Ports</li> <li>Non-Blocking</li> <li>Standard L2 Features</li> <li>IPv4 and IPv6</li> <li>RJ45 Console Port: Web Management, CLI</li> <li>Power-over-Ethernet (IEEE802.3at)</li> <li>- Up to 30W per port</li> <li>- Up to 400W total PoE budget</li> </ul>	<ul> <li>48 RJ45 10/100/1000 Mbps Ports</li> <li>4 SFP 1-G Ports</li> <li>Non-Blocking</li> <li>Standard L2 Features</li> <li>IPv4 and IPv6</li> <li>RJ45 Console Port: Web Management GUI, CLI</li> </ul>	
Switching Capacity	• 104 Gbps	• 104 Gbps	
Energy Efficient Ethernet	• 802.3az	• 802.3az	
Power Supply	• 500W	• 65W	
Weight	• 11.7 lbs / 5.3kg	• 6.8 lbs / 3.1kg	
Dimensions (WxDxH)	• 440 x 379 x 43mm (17.3" x 14.9" x 1.7")	• 440 x 279 x 43mm (17.3" x 11" x 1.7")	
Switching Features	• 16K MAC address entries • Link Aggregation - 802.3ad with LACP - Up to 12 aggregation groups up to 8 ports per group  • Double tagging: - 802.1 Q-in-Q - 802.1ad provider bridge - Unqualified learning and forwarding	• Storm protection - Broadcast - Multicast - IGMP: - IGMP snooping v1/v2/v3  • Spanning tree - 802.1D spanning tree - 802.1s multiple - Jumbo frames up to 9KB	
VLAN	802.1Q tagging, port and protocol based     Dynamic VLAN Support (GVRP)	<ul><li>256 active VLANs</li><li>Voice VLAN support</li></ul>	
Quality of Service (QoS)	<ul> <li>L2/L3/L4Traffic Classification/ Priority Management</li> <li>Deficit WRR and Strict Priority Scheduling</li> <li>Traffic shaping</li> <li>IP based (all ports)</li> <li>Port based (all ports)</li> <li>Port based shaping QoS aware</li> <li>4 priority queues per port</li> <li>IPv4/v6 DiffServ</li> </ul>	<ul> <li>Per port bandwidth management</li> <li>Resolution 64KB</li> <li>Packet prioritization based on ingress/egress ports using predefined value</li> <li>Ingress/Egress metering at 64KB increments</li> <li>Ingress/egress policer</li> <li>Ingress and egress co-work</li> </ul>	
Security Features	802.3x Port-Based Authentication     Switch access password protection     Layer 2, 3, 4 Access Control List (512 rules)	RADIUS and TACACS+     Authentication     SSH/SSL Encryption	
Management Features	Web-based management interface – HTTP/HTTPS     - Telnet (4 sessions)     - SNMP     SNMP     Industry standard CLI with telnet, SSH, or local management port     - Scripting capability     - Command completion     - Context-sensitive "Help"	Software upgrade/download     Multiple configuration file upload/download by TFTP and HTTP     Auto upgrade     DHCP functions     Telnet-Server     SNMP vl/v2c/v3     RMON	
PoE Features	Compliant with IEEE 802.3af-2003 & IEEE 802.3at-2009 PoE on 10/100/1000Base-T ports only (ports 1~48) Power start/stop (remote sense) Power feeding over 1/2 and 3/6 data twisted pair of Cat. 5 UTP/STP cable Independent overload and short-circuit protection for each port LED indicators for power status per port Per port configuration Port priority configuration IEEE 802.3af/IEEE 802.3at MIB for Power over Ethernet function		
Operating Temperature	• 0 ~ 50°C		

Please refer to the Supermicro website for all the latest updates:

http://www.supermicro.com/networking

# **Layer 2/3 Ethernet Switches**

Enterprise-class performance with advanced switching capabilities in a 1U form factor. Highly cost-effective 1/10-Gigabit Ethernet Networking – Standalone or Top-of-Rack.





Rear View

Model	SSE-G48-TG4	SSE-G24-TG4
Port Attributes	48 One Gigabit Ethernet ports     48 RJ45 Copper ports     Four fiber SFP combo ports     Out-of-band RS-232 Management port     Up to four 10-Gigabit Ethernet uplinks     Up to two stacking ports	<ul> <li>24 One Gigabit Ethernet ports</li> <li>24 RJ45 Copper ports</li> <li>Four fiber SFP combo ports</li> <li>Out-of-band RS-232 Management port</li> <li>Up to four 10-Gigabit Ethernet uplinks</li> <li>Up to two stacking ports</li> </ul>
Switching Capacity	• 184 Gbps	• 136Gbps
Stacking Performance	• Up to 48 Gbps	• Up to 48 Gbps
Power Consumption	• 145W	• 105W
Weight	• 13.7 lbs / 6.20 kg (w/ modules) 13.4 lbs / 6.06 kg (w/o modules)	• 12.6 lbs / 5.70 kg (w/ modules) 12.2 lbs /5.54 kg (w/o modules)
Dimensions (WxDxH)	• 440 x 387 x 43mm (17.3" x 15.2" x 1.7")	
Availability	<ul><li>Spanning Tree (802.1D)</li><li>Rapid Spanning Tree (802.1w)</li></ul>	<ul><li>Multiple Spanning Trees (802.1s)</li><li>Virtual Redundant Routing Protocol (VRRP)</li></ul>
VLAN	802.1Q tagging, port and protocol based     Dynamic VLAN Support (GVRP)	1K Static VLANs
Quality of Service and DiffServ	<ul> <li>8 priority queues per port</li> <li>Adjusted WRR and Strict Priority Scheduling</li> <li>Layer 2, 3, 4 Prioritization</li> </ul>	Marking     Metering / Rate limiting
Switching Features	<ul> <li>Link Aggregation - 24 groups with 8 members per group</li> <li>LACP Support</li> <li>Link Layer Discovery Protocol (802.1AB)</li> </ul>	<ul> <li>Jumbo Frames up to 9KB</li> <li>Port Mirroring – N to 1. Tx &amp; Rx Configurable</li> </ul>
Routing Features	<ul> <li>Static Routing, RIP v1/v2, RIPng, OSPF v1/v2/v3 and BGP</li> <li>IPv4 and IPv6 Routing</li> </ul>	<ul> <li>VRRP (Virtual Router Redundancy Protocol)</li> <li>DVMRP (Distance Vector Multicast Routing Protocol</li> </ul>
Multicast	• IGMP Snooping v1, v2, v3 • IGMP v1, v2, v3	<ul><li>PIM SM, PIM DM</li><li>PIM SMv6</li></ul>
Security Features	<ul> <li>802.3x Port Based Authentication</li> <li>Switch access password protection</li> <li>Layer 2, 3, 4 Access Control Lists (256 rules)</li> </ul>	RADIUS and TACACS+ Authentication     SSH, SSL Encryption
Management Features	Web-based management interface – HTTP/HTTPS Telnet (4 sessions) SNMP Industry standard CLI with telnet, SSH, or local management port Scripting capability Command completion Context-sensitive "Help"	<ul> <li>Multiple levels of user privilege (CLI and Web UI)</li> <li>SNMP v1, v2, v3</li> <li>Four RMON Groups - (1, 2, 3 and 9)</li> <li>Logging – syslog</li> <li>Dual firmware images</li> <li>Configuration file - upload / download</li> </ul>
Operating Temperature	• 0 ~ 40°C	

## **Options** (order at least one, maximum two with each SSE-G24-TG4 or SSE-G48-TG4)



AOM-SSE-X2C

Two-port CX4 connector module for copper connections



AOM-SSE-X2F

Two-port XFP connector module for fiber connections



AOM-SSE-X2S

Two-port SFP+ connector module for copper or fiber connections

# **Layer 2/3 Ethernet Switches**

Enterprise-class performance with advanced switching capabilities in a 1U form factor. Highly cost-effective 10-Gigabit Ethernet Networking – Standalone or Top-of-Rack.





Rear View	2000 Will			
Model	SSE-X24S/SR	SSE-X3348S/SR	SSE-X3348T/TR	SSE-X3848S
Port Attributes	24 Ten Gigabit Ethernet ports     - SFP+ Connectors     1 One-Gigabit Ethernet port     - RJ45 Connector     Out-of-band RS-232 Management port	<ul> <li>48 Ten-Gigabit Ethernet ports</li> <li>- SFP+ Connectors</li> <li>4 Forty-Gigabit Ethernet ports</li> <li>- QSFP Connectors</li> <li>2 One-Gigabit Ethernet ports</li> <li>- RJ45 Connectors</li> <li>Out-of-band RS-232 Management port</li> </ul>	48 Ten-Gigabit Ethernet ports IoGBASE-T RJ45 connectors Forty-Gigabit Ethernet ports QSFP Connectors One-Gigabit Ethernet ports Cone-Gigabit Ethernet ports RJ45 Connectors Out-of-band RS-232 Management port Energy Efficient Ethernet-IEEE 802.3az	48 Ten-Gigabit Ethernet ports     SFP+ Connectors     4 Forty-Gigabit Ethernet ports     QSFP Connectors     1 RJ45 Out-of-Band Ethernet Management Port     1 RJ45 Console port     1 USB port
Switching Capacity	• 480 Gbps	• 1284 Gbps	• 1284 Gbps	• 1280 Gbps
Power Consumption	<ul><li>176W (Redundant Power Supplies)</li><li>Reverse airflow model available</li></ul>	<ul><li>326W (Redundant Power Supplies)</li><li>Reverse airflow model available</li></ul>	<ul><li> 357W (Redundant Power Supplies)</li><li> Reverse airflow model available</li></ul>	325W (Dual Redundant, Hot- Swappable, High Efficiency, 600W Power Supplies)
Weight	• 16.7 lbs / 7.58 kg	• 18.1 lbs / 8.2 kg	• 20.3 lbs / 9.22 kg	• 21.0 lbs / 9.6kg
Dimensions (WxDxH)	• 440 x 387 x 43mm (17.3" x 15.2" x 1.7")	• 438 x 473 x 43mm (17.3" x 18.6" x 1.7")	• 438 x 473 x 43mm (17.3" x 18.6" x 1.7")	• 442 x 473 x 44 mm (17.4" x 18.6" x 1.7")
Availability	<ul> <li>Spanning Tree (802.1D)</li> <li>Rapid Spanning Tree (802.1w)</li> </ul>	<ul> <li>Multiple Spanning Trees (802.1s)</li> <li>Virtual Redundant Routing Protocol (VRRP)</li> </ul>		Spanning Tree (802.1D)     Rapid Spanning Tree (802.1w)     Multiple Spanning Trees (802.1s)     BPDU Guard     Root Guard
VLAN	802.1Q tagging, port and protocol based     Dynamic VLAN Support (GVRP)	4K Static VLANs		802.1Q tagging, port based     4K Layer 2 VLANs     4K Layer 3 VLANs     VLAN Tagging (802.3ac)
Quality of Service and DiffServ	8 priority queues per port     Adjusted WRR and Strict Priority Scheduling     Layer 2, 3, 4 Prioritization	<ul> <li>Marking</li> <li>Metering / Rate limiting</li> </ul>		8 priority queues per port     QoS (with Diffserv)     COS     Storm Control     Flow Control
Switching Features	Link Aggregation - 24 groups with 8 members per group LACP Support Link Layer Discovery Protocol (802.1AB)	<ul> <li>Jumbo Frames up to 9KB</li> <li>Port Mirroring – N to 1. Tx &amp; Rx Configurable</li> </ul>		Link Aggregation - 802.3ad with LACP - Up to 81 aggregation groups - Up to 8 ports per group Link Layer Discovery Protocol (802.1AB) Jumbo Frames up to 9KB Port Mirroring Forwarding Table size – 64K
Routing Features	Static Routing, RIP v1/v2, RIPng, OSPF v1/v2/v3 and BGP     IPv4 and IPv6 Routing	<ul> <li>VRRP (Virtual Router Redundancy Protocol)</li> <li>DVMRP (Distance Vector Multicast Routing Protocol</li> </ul>		Static Routing     OSPF v2 and BGP4     IPv4 and IPv6 Routing     Address Resolution Protocol (ARP)     Equal Cost multi-path (ECMP)
Multicast	<ul><li>IGMP Snooping v1, v2, v3</li><li>IGMP v1, v2, v3</li></ul>	<ul><li>PIM SM, PIM DM</li><li>PIM SMv6</li></ul>		IGMP Snooping (4K groups)
Security Features	802.3x Port Based Authentication     Switch access password protection     Layer 2, 3, 4 Access Control Lists (256 rules)	<ul> <li>RADIUS and TACACS+ Authentication</li> <li>SSH, SSL Encryption</li> </ul>		Switch access password protection     RADIUS and TACACS+     Authentication     Access Control Lists (to 4K)     SSH, SSL Encryption
Management Features	Web-based management interface — HTTP/HTTPS Telnet (4 sessions) SNMP Industry standard CLI with telnet, SSH, or local management port Scripting capability Command completion Context-sensitive "Help"	Multiple levels of user privilege (CLI and Web UI) SNMP v1, v2, v3 Four RMON Groups - (1, 2, 3 and 9) Logging – syslog Dual firmware images Configuration file - upload / download		Industry standard CLI with SSH, or local management port  XML-RPC  Command completion  Context-sensitive "Help"  SNMP v1/v2/v3  DHCP  Uplink Failure Detection  Web-based management interface – (future)  HTTP/HTTPS  Syslog  NTP
Operating Temperature	• 0 ~ 40°C	• 0 ~ 47°C	• 0 ~ 45°C	• 0 ~ 45°C

# SuperRack®



42U Open Frame SRK-42OR-03 (1016mm Deep) Generation 2



42U Enclosure SRK-42SE-03 (1016mm Deep) Generation 2



42U Open Frame SRK-42OR-01 (950mm Deep)



42U Open Frame SRK-42OR-02



42U Enclosure SRK-42SE-01 (1000mm Deep)



42U Enclosure SRK-42SE-02 (1225mm Deep)

Supermicro's SuperRack® systems were designed for ease of integration, implementation, and deployment. Their easy rear access and modularized Building Block design makes them ideal for hot-swap-capable servers, such as Supermicro's Twin and Double-Sided Storage® families. For a rack system that is convenient, reliable, and customizable, the Supermicro SuperRack® is the ideal choice.

## Key Features:

Per-U Design - Ground-breaking Per-U design concept simplifies cable management and minimizes integration time

Accessible - Versatile Front and Rear access hot-plug optimizations provide an improve service experience

Optimized Air Flow - Reduced cabling optimizes air flow and improves cooling

Building Block Design - Building-block design and intuitive installation process reduce overall deployment schedules

Expandable - With unique add-on expansion units the SuperRack® easily accommodates many different server configurations

Customizable - Fully customizable options offer a well-rounded total Rack solution and service

SuperRack® Total Solution - Supermicro provides rack system configuration, integration, testing, burn-in, shipping whole rack system to enduser, please contact sales for details

# SuperRack® Solutions: Pre-Configured, Fully Tested and Application Optimized

- Hadoop Clusters for Big Data Analytics
- Rack Solutions for Virtualization and Cloud Computing
- Rack Solutions for Search Engine, Web 2.0
- HPC Clusters with GPU Accelerator
- Scale-Out Storage with Extreme Drive Density
- Rack Integration Service from Design to Delivery

For detailed information, please contact your Supermicro sales representative; or, visit: http://www.supermicro.com/products/rack



 Versatile Front and Rear access hot-plug optimizations



 Per-U Design simplifies cable management and minimizes integration time



# **Quick-Release Slide Rails**

## The Supermicro Tool-less, Quick-release Slide Rails

Designed for quick and easy installation and access to Supermicro's server equipment. Several different sizes are provided to accommodate a variety of Supermicro server systems.







Model Part#	MCP-290-00054-0N	MCP-290-00062-0N
Product	Optional rail set	Optional rail set
Content	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail
Chassis Type	1U, 17.2" width	1U, 17.2" width
Mechanism	Linear	Linear
Outer Rail Extendable Length	25.6"~33.05"	25.6"~33.05"
Compatible Chassis	Optional for SC813, 814, 815	Optional for SC118, 119, 808, 809, 816, 818, 819

# Marie V

## For Short-depth Chassis Rack



<b>Model Part#</b>	MCP-290-00052-0N-BULK	MCP-290-00056-0N
Product	Optional outer rail bulk pack	Optional short-depth outer rail
Content	Quick-release outer rail (10 set/pack)	Short quick-release outer rail
Chassis Type	1U, 17.2" width	1U, 17.2" width in short-depth rack
Mechanism	Linear	Linear
Outer Rail Extendable Length	25.6"~33.05"	19"~26.4"
Compatible Chassis	Optional for SC113, 113M, 118, 119, 512F-280/350/410/441/520/600, 515, 808, 809, 813, 813M, 814, 815, 816, 818, 819	Optional for SC113, 113M, 118, 119, 512F-280/350/410/441/520/600, 515, 808, 809, 813, 813M, 814, 815, 816, 818, 819



For Short-depth Chassis Rack



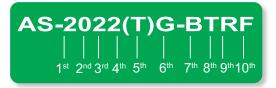
Model Part#	MCP-290-00053-0N	MCP-290-00057-0N	MCP-290-00058-0N
Product	Default rail set	Default rail set	Optional short-depth rail set
Content	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail
Chassis Type	2~3U, 17.2" width	4U, 17.2" width	2~4U, 17.2" width in short-depth rack
Mechanism	Ball-bearing, support round hole racks with adapter MCP-290-00060-0N	Ball-bearing, support round hole racks with adapter MCP-290-00060-0N	Ball-bearing, support round hole racks with adapter MCP-290-00060-0N
Outer Rail Extendable Length	26.5"~36.4"	26.5"~36.4"	19"~26.6"
Compatible Chassis	Default for SC213, 216, 823M, 825, 825M, 826, 827, 828, 835, 836, 936, 937, 938, 939	Default for SC417, 418, 758, 846, 847, 848, optional for SC842	Optional for SC213, 216, 417, 418, 747, 748, 758, 823M, 825, 825M, 826, 827, 828, 835, 836, 842, 846, 847, 848, 936, 937, 938, 939





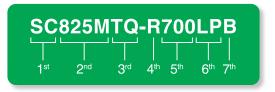
## **Motherboard Naming Guide**

Character	Representation	Options
1st + 2nd	СРИ Туре	• H8 = AMD Opteron <sup>TM</sup> Processor • H9 = AMD New Generation
3rd	CPU Supported	<ul> <li>Q = Quad CPU</li> <li>D = Dual CPU</li> <li>S = Single CPU</li> </ul>
4th	Chipset / Board Type	
5th	Interface / Form Factor	• 3 = SAS • 6 = LSI 2008 SAS2 • 7 = LSI 2208 or 2308 SAS2 • 8 = Dual Channel SCSI • A = Workstation Board • P = Proprietary Form Factor • E = IDE / SATA • G = GPU • i = SATA only • L = Low Cost • M = microATX • R = 1U (Rack) Board • T = Twin architecture • U = UIO architecture • V = mini-iTX Form Factor
5.5th	Board Type	For Quad Socket MB  • += Motherboard to support 1U platform For Dual Socket MB  • += Socket-F Motherboard with 16 DIMM
6th	Interface / I/O Optionls /Memory Type	



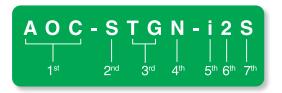
## **A+ Server Naming Guide**

Character	Representation	Options
1st	Form Factor	• 1 = 1U • 2 = 2U • 3 = 3U • 4 = 4U / Tower or Mid-Tower
2nd	HD Tray Type	• 0 = 3.5" • 1 = 2.5"
3rd	CPU	<ul> <li>1 = Single CPU</li> <li>2 = Dual CPU</li> <li>4 = Quad CPU</li> </ul>
4th	Generation	<ul> <li>0 = 1st Generation (Opteron 940)</li> <li>1 = 2nd Generation (Socket F/AM2)</li> <li>2 = 3rd Generation (Socket G34, C32, AM3+)</li> </ul>
5th	Server Platform	• T = Twin Server • G = GPU • M = MicroCloud
6th	MB Platform / Chipset	<ul> <li>A = AMD Chipset (Socket F/AM2+/AM3+)</li> <li>C = Socket C32 Board</li> <li>G = Socket G34 Board</li> <li>S = Serverworks Chipset</li> <li>M = nVidia MCP55 Pro Chipset</li> </ul>
7th/8th	Interface Type	• 2 = DDR2 • 3 = SAS • 6 = SAS2 • 8 = SCSI • T = SATA • I = IDE • U = UIO • N= N: Neutral (2 std. PCI-E &SATA • L = Cost-Effective Solution • H(B) = (Twin hot-plug) • H(D) = Dual node twin hot-plug • M(R/F) = Short depth <15" chassis rear (R= Rear/F= Front I/O) • IBQ(IBX) = InfiniBand QDR (DDR) • 70 = LSI 2008 • 71 = LSI 2108 • 72 = LSI 2208 • 73 = LSI 2308
9th and higher	Power Redundancy / IPMI	<ul> <li>4 = Quad LAN</li> <li>F = IPMI (Intelligent Platform Management Interface)</li> <li>R = Redundant Power</li> <li>+ = Max Memory Support Enabled (12 or up per CPU Socket)</li> <li>B = Black Chassis (only at last place)</li> </ul>



## **Chassis Naming Guide**

Character	Representation	Options		
1st	Prefix	• SC = Super Chassis (Model Number)		
181	Tienx	• CSE = Super Chassis (Part Number Prefix)		
		2.5" HDD Chassis	3.5" HDD Chassis	Mobile Rack
		1st Digit = Height  • 0 = Twin / Extra short  • 1 = 1 U  • 2 = 2U  • 3 = 3U / Mid-Tower  • 4 = 4U / Tower  • 5 = 5U  • 6 = 6U	1st Digit = Category  • 5xx = Compact size  • 7xx = Tower / Workstation  • 8xx / 9xx = Rackable chassis  • xx6 = Storage chassis  • xx9 = Resource Optimized	1st Digit (Default = "M")
2nd	Type/Family	2nd Digit = Generation	2nd Digit = Height  • 0 = Twin / Extra short  • 1 = 1 U  • 2 = 2 U  • 3 = 3 U / Mid-Tower  • 4 = 4 U / Tower  • 5 = 5 U  • 6 = 6 U	2nd Digit = # of 5.25" Bays
		3rd Digit = Category  1 = Cost Effective Series 2 = Standard Series 3 = High-end Series 6 = Storage Series 8 = MP motherboard Series 9 = Resource Optimized	3rd Digit = Generation	3rd Digit = # of 2.5" HDD Converted
		4th Digit = Type (multiple types possible) • (none) = Regular • E = Lower Cost (Economic) • F = Modified Fan (originally use blower) • H = Specialized for Intel Itanium 2 • L = Low Cost • M = Short-depth • + = Specialized for AMD MBs (can be placed after backplane type)	4th Digit = Type (multiple types possible)  • (none) = Regular  • E = Lower Cost (Economic)  • F = Modified Fan (originally use blower)  • H = Specialized for Intel® Itanium 2  • L = Cost Effective  • M = Short-depth  • X = 10+ Slots  • + = Specialized for AMD MBs (can be placed after backplane type)	
3rd	Backplane Type	• (none) = No backplane design • A = SAS2/SATA3 with iPass direct-attach connection • AC(#) = SAS3/SATA3 & (#) of NVMe drives with mini-SAS HD direct-attach connection • E1/E16 = SAS(2)/SATA(3) with 1 expander • E2/E26 = SAS(2)/SATA(3) with 2 expanders • E1C = SAS3/SATA3 with 1 expander • E2C = SAS3/SATA3 with 2 expanders	H / HD / HQ = Hot-swap MB nodes design     i = No backplane SKU     S / SI = SCSI (Single-Channel)     S2 = SCSI (Dual-Channel)	• T = SAS / SATA • TQ = SAS / SATA with SES2 support • TS = Backplane not installed • TG / G = GPU/Xeon Phi™ optimized
4th	Power Supply	• (none) = Non-redundant power supply • R = Redundant power supply		
5th	Power Supply Wattage	• (example: 900 = 900 Watts)		
6th	Rear Window I/O	<ul><li>(none) = Optimized (may not be standard)</li><li>C = Standard I/O Rear Window</li></ul>	• LP = Low Profile Rear Window • RC = Rear Window for Riser Cards, Type I	<ul> <li>RC2 = Rear Window for Riser Cards, Type II</li> <li>U = UIO Rear Window</li> </ul>
7th	Chassis Color	<ul> <li>(none) = Beige</li> <li>B = Black</li> <li>V = Silver</li> </ul>		



## **Network Adapter Naming Guide**

Character	Representation	Options	
1st	Product Family	AOC = Add On Card	
2nd	Form Factor	U = UIO S = Standard	P = Proprietary C = MicroLP
3rd	Product Type/Speed	G = GbE (1Gb/s) TG = 10GbE (10Gb/s) IBF = InfiniBand FDR (56Gb/s)	IBQ = InfiniBand QDR (40Gb/s) INF = InfiniBand DDR (20Gb/s)
4th	Chipset Manufacturer (optional)	N = Niantec (82599ES)	P = Powerville (i350)
5th	Chipset Model	i = Intel m = Mellanox	b = Broadcom
6th	Number of Ports	1 = 1 port 2 = 2 ports	4 = 4 ports
7th	Connector Type (optional)	S = SFP+	T = 10GBase-T



## **Riser Card Naming Guide**

Character	Representation	Options		
1st	Part Number Prefix	• RSC: Riser Cards (New Naming Convention) • CSE: Riser Cards (Old Naming Convention)		
2nd	Riser Card Type		• R1U: Fits 1U chassis • R2U: Fits 2U chassis (New Naming Convention) • RR2U: Fits 2U chassis (Old Naming Convention)	
3rd	I/O Slot Type (Connect to Motherboard)	<ul> <li>U: Fits UIO MB</li> <li>T: Fits Twin MB</li> <li>E: Fits MBs with SPEC</li> <li>XE: Fits MBs with SXB-E</li> </ul>	• G: Fits GPU MBs • F: Fits Fat Twin MBs • FF: Fits Fat Twin MBs w/ Front IO • FR: Fits Fat Twin MBs w/ Rear I/O	
		• U: UIO slot • E8/E4/E16: PCI-E x4/x8/16 output • X: PCI-X output	• X33: PCI output • A: Active	
4th	I/O Slots On Riser	<ul> <li>+: Additional Feature ( such as Gen2 support)</li> <li>B: Riser Card Fits in Rear/Back of the MB</li> <li>A: Riser Card Fits in Front of the MB</li> <li>R: Right Hand Side Riser Card</li> </ul>	<ul> <li>G: For GPU Cards</li> <li>PR: Proprietary</li> <li>X9: Supported on X9 Platform</li> <li>UP: Support Single Processor Motherboard</li> </ul>	

## Server Building Block Solutions® - The Supermicro Advantage

With advanced in-house server building block designs and uncompromising quality control, Supermicro's expert engineers have created a wide range of high-performance, high-reliability, and cost-effective solutions. Supermicro's first-to-market offerings provide fully optimized functionality, compatibility and a system integration "quality guarantee" for mission-critical applications.

## **Supermicro Quality and Reliability**

All Supermicro products are designed with the highest quality optimized components. To ensure customers peace of mind, all Supermicro Building Block Solutions® must pass a strict validation process, and our "one stop shop" capability will assure their business success. With the highest reliability and performance in mind Enterprise Level hard disk drives are a requirement for Supermicro systems.

## The Most Extensive Server Building Block Product Line in the Industry

Supermicro's engineering expertise has produced a wide variety of AMD Opteron™ based serverboards and optimized chassis. With these state-of-the-art Server Building Block Solutions® and outstanding technical support, customers can be assured of the industry's best, most optimized solutions for their IT problems. They can ramp up their businesses more quickly and successfully with reduced total costs of ownership.

## AMD Opteron<sup>™</sup> 16/12/8/6/4-Core 6000/4000/3000 Series Processor-Based Solutions

Supermicro's industry-leading, first-to-market line of AMD Opteron<sup>m</sup> based Building Block Solutions<sup>m</sup> feature the latest AMD components and technologies. These multi-core based solutions are loaded with features and engineered to perform with minimal power. The latest AMD Opteron<sup>m</sup> processor 6000/4000 series delivers many new features over previous processor generations, including up to 16 processor cores and 12MB shared L3 cache, with additional performance and security features.

## **Advanced Storage Technology**

Supermicro's innovative Double-Sided Storage (SC417) provides extra high-density storage to maximize space and power efficiency. With support for up to 88x 2.5" HDDs in JBOD mode and 72x 2.5" HDDs in server mode, the SC417 provides direct hot-swap access to all the Storage Drives. Additional high value features include Gold Level redundant, hot-swappable Power Supplies and integrated 6Gb/s SAS (SAS 2.0) that doubles the storage data transfer rate to 6.0 Gbps for the most advanced applications.

## **Onboard IPMI 2.0**

Many Supermicro H8 motherboards now offer IPMI 2.0 capabilities onboard through a dedicated LAN port to support both Virtual Media over LAN and KVM-over-LAN. This convenient remote management feature is provided through an onboard BMC (Baseboard Management Controller) that improves reliability and maintainability while reducing costs.

## **Hybrid CPU + GPU Supercomputing Systems**

With supercomputer-level performance, these hybrid CPU + GPU supercomputing solutions are ideal for scientific computing, CAD/CAM, oil and gas exploration, medical imaging, and other computationally-intensive applications.

## **Advanced Power Saving Components**

Supermicro's motherboards utilize high-end components such as high-efficiency VRMs optimized to reduce energy consumption. These energy-efficient designs make Supermicro an industry leader in performance-per-watt and per-dollar.



## 95%+ Peak Power Supply Efficiency Designed for Power Savings & Environmental Protection

Supermicro has mastered the power supply design challenge to produce high-quality, high-performance solutions with peak efficiency ratings of 95% and higher utilizing advanced digital switching technology. This makes Supermicro systems the leading Green standard for server chassis solutions.



#### 100% Redundant Cooling Systems

With patented 100% redundant cooling designs, Supermicro systems can run continuously at their full potential, even when a fan failure occurs. With expertly engineered high-performance fans and unique air shrouds, Supermicro offers dramatically reduced downtime due to thermal issues.



## **Supermicro is RoHS Compliant**

Supermicro is proud to rally a migration to earth-friendly server products that contain minimal amounts of hazardous substances. With the RoHS Directive changing the electronics industry worldwide, Supermicro produces environmentally safe products that meet or exceed RoHS requirements.

## Windows 8 and Windows Server 2012

Supermicro endorses the use of Windows 8 and Windows Server 2012, the most recent released publicly available versions of Microsoft Windows, for its motherboard and server products. Please contact Supermicro for the very latest compatible and logo certified products.

## The Industry's Broadest Selection of Optimized Server Systems

Supermicro's server systems are carefully designed with our Server Building Block Solutions® to provide the ultimate in performance, efficiency and improved TCO. With the industry's broadest variety of advanced technology server systems, Supermicro has the best solution for every IT need.

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## **Worldwide Headquarters:**

## Super Micro Computer, Inc.

980 Rock Ave.

San Jose, CA 95131, USA

Tel: +1-408-503-8000

Fax: +1-408-503-8008

E-mail: Marketing@Supermicro.com

#### **Europe Subsidiary:**

## Super Micro Computer, B.V.

Het Sterrenbeeld 28, 5215 ML, 's-Hertogenbosch, The Netherlands Tel: +31-73-640-0390 Fax: +31-73-641-6525 E-mail: Marketing@Supermicro.nl

#### Asia Subsidiary:

#### Super Micro Computer, Inc. (Taiwan Office)

3F., No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 23511, Taiwan Tel: +886-2-8226-3990 Fax: +886-2-8226-3991 E-mail: Marketing@Supermicro.com.tw

#### **Supermicro Science & Technology Park**

No.1899, Xingfeng Road, Bade City, Taoyuan County 334, Taiwan Tel: +886-2-8226-3990 Fax: +886-2-8226-3991 E-mail: Marketing@Supermicro.com.tw

#### **China Subsidiary:**

## Super Micro Computer, Inc. (Beijing Office)

Suite 1208 JiaHua Building D Shangdi, Haidian District, Beijing China 100085 Tel: +86-10-62969165 E-mail: Marketing@Supermicro.com

#### Supermicro Japan

S-7F N.E.S Bldg., 22-14, Sakuragaoka-cho, Shibuya-Ku, Tokyo, 150-0031 Japan Tel: +81-3-5728-5196 Tech Support: japanservice@supermicro.com E-mail: Marketing@Supermicro.com















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